DOCUMENT RESUME

ED 213 932 CE 031 658

AUTHOR Schira, Norma Jean; Burton, Sharon Y.
TITLE Assessment of Occupational Opportunities in Health Occupations for Handicapped.
INSTITUTION Western Kentucky Univ., Bowling Green. Center for Career and Vocational Teacher Education.
SPONS AGENCY Kentucky State Dept. of Education, Frankfort. Bureau of Vocational Education.
PUB DATE Jul 81
NOTE 114p.

EDRS PRICE MF01/PC05 Plus Postage.
DESCRIPTORS *Disabilities; Diseases; *Educational Needs; Employer Attitudes; *Employment Opportunities; *Employment Patterns; *Health Occupations; Hearing Impairments; Job Training; Learning Disabilities; Needs Assessment; Physical Disabilities; Questionnaires; Secondary Education; Speech Handicaps; State Programs; State Surveys; Student Needs; Teacher Attitudes; Visual Impairments; *Vocational Education
IDENTIFIERS Kentucky

ABSTRACT

A study identified health occupations education programs currently offered to handicapped students and health occupations positions now occupied by handicapped employees throughout the state of Kentucky. In addition, the study allowed for assessment of respondent's attitudes toward educating and working with handicapped individuals. Of 1649 teachers and health occupations practitioners receiving project-developed questionnaires, 87 teachers and 297 practitioners completed surveys. Included among those areas examined were the following: teacher/practitioner education and employment background, health occupations programs/positions currently offered to/occupied by handicapped individuals; positions most frequently applied for/accepted by/filled by handicapped individuals; areas in which individuals with specific handicaps can be expected to compete successfully; and modifications that would allow handicapped students to compete on an equal basis with non-handicapped individuals. Teacher and practitioner responses indicated that the disadvantaged and handicapped are currently offered education and employment in all health occupations areas primarily at basic entry levels. In addition, most of these individuals apply for low or entry-level positions. Because both teacher and practitioner responses indicated a lack of interest and awareness of the difficulties of the handicapped, project staff recommended a strong program in education to help change the attitudes of health personnel. (MN)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

KY8113116

ED213932

# ASSESSMENT OF OCCUPATIONAL OPPORTUNITIES IN HEALTH OCCUPATIONS FOR HANDICAPPED

By

Norma Jean Schira, Ed.D.
Project Director

Sharon Y. Burton, M.S.
Research Assistant

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

J. D. Ellis

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

July, 1981

Center for Career and Vocational Teacher Education
Western Kentucky University
Bowling Green, Kentucky 42101

Project Number: D-988DR023F

The Research reported herein was performed pursuant to a contract with the Commonwealth of Kentucky, State Department of Education. Contractors undertaking projects under such sponsorship are encouraged to express freely their professional judgement in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official State Department of Education position or policy.

COMMONWEALTH OF KENTUCKY
STATE DEPARTMENT OF EDUCATION
BUREAU OF VOCATIONAL EDUCATION

CE031658

## AGREEMENT OF NONDISCRIMINATION

Title VI of the Civil Rights Act of 1964 states that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity receiving federal financial assistance. Therefore, the vocational education research, exemplary and dissemination program of the Commonwealth of Kentucky, like every program or activity receiving financial assistance from the Department of Health, Education and Welfare, must be operated in compliance with this law.

TABLE OF CONTENTS


| | | Page |
|---|---|---|
| List of Tables | | iv |
| Abstract | | v |
| Chapter 1 | INTRODUCTION | 1 |
| | Need for Study | 2 |
| | Objectives | 5 |
| Chapter 2 | RESEARCH METHODS AND PROCEDURES | 6 |
| | Definition of Terms | 7 |
| | Limitations of Study | 10 |
| | Sample | 12 |
| | Instrument Development | 12 |
| | Data Collection | 13 |
| | Data Analysis | 13 |
| Chapter 3 | ANALYSIS OF DATA | 14 |
| | Characteristics of Sample | 14 |
| Chapter 4 | CONCLUSIONS AND RECOMMENDATIONS | 45 |
| | Summary | 49 |
| Appendix A | Letters, Survey Materials | 53 |
| Appendix B | Reactions and Comments from Respondents | 77 |
| Appendix C | Tables of Problem Area Selections by Teachers and Practitioners | 87 |

LIST OF TABLES


| | | Page |
|---|---|---|
| TABLE 1 | INSTRUMENT RETURN RATE FOR TEACHER AND PRACTITIONER SAMPLES. . . . . | 14 |
| TABLE 2 | AREA OF PRIMARY RESPONSIBILITY. . . . . | 15 |
| TABLE 3 | EDUCATIONAL PREPARATION OF RESPONDENTS. . . . . | 16 |
| TABLE 4 | YEARS OF EXPERIENCE . . . . . | 17 |
| TABLE 5 | EXPERIENCE WORKING WITH OR TEACHING THE HANDICAPPED . . . . . | 18 |
| TABLE 6 | HEALTH OCCUPATIONS PROGRAMS/POSITIONS CURRENTLY OFFERED TO/OCCUPIED BY HANDICAPPED. . . . . | 19 |
| TABLE 7 | HEALTH OCCUPATIONS PROGRAMS/POSITIONS MOST FREQUENTLY SELECTED/APPLIED FOR BY HANDICAPPED. . . | 22 |
| TABLE 8 | HEALTH OCCUPATIONS PROGRAMS/POSITIONS TO WHICH HANDICAPPED ARE ADMITTED/HIRED. . . . . | 25 |
| TABLE 9 | HEALTH OCCUPATIONS PROGRAMS/POSITIONS SUCCESSFULLY COMPLETED/OCCUPIED BY HANDICAPPED . . . | 27 |
| TABLE 10 | HEALTH OCCUPATIONS PROGRAMS/POSITIONS IN WHICH HANDICAPPED CAN COMPETE EQUALLY WITHOUT PROGRAM/JOB MODIFICATIONS . . . . . | 30 |
| TABLE 11 | HEALTH OCCUPATIONS PROGRAMS/POSITIONS IN WHICH HANDICAPPED CAN EQUALLY COMPETE WITH PROGRAM/ JOB MODIFICATIONS . . . . . | 36 |
| TABLE 12 | ITEMS CONSIDERED POTENTIAL PROBLEMS TO HANDICAPPED IN HEALTH OCCUPATIONS PROGRAMS/ POSITIONS . . . . . | 42 |

PROJECT ABSTRACT

TITLE OF PROJECT: ASSESSMENT OF OCCUPATIONAL OPPORTUNITIES IN HEALTH OCCUPATIONS FOR HANDICAPPED

PROJECT DURATION: July 1, 1980 to June 30, 1981

OBJECTIVES: This project sought to accomplish the following objectives:

1) Assess and identify the types of occupational programs in health occupations that are available to handicapped students;
2) Prepare a catalog of opportunities according to handicap classifications with suggestions about modifications;
3) Prepare instructional materials for special needs students and package for field-testing;
4) Provide inservice to health occupations teachers in the strategies used with special needs students.

PROCEDURES: The following procedures were utilized to achieve the project's objectives:

1a) Surveyed health occupations programs to determine the areas selected and completed by special needs students;
1b) Surveyed health occupations professionals to determine vocational areas in which students with various handicaps could be expected to equally compete (with and without program modifications);
2) Developed a catalog listing of opportunities according to classifications of handicapped incorporating necessary modifications as identified by professional practitioners in the health field;
3) Revised existing instructional materials for adaptability for handicapped students;
4) Prepared instructional materials incorporating modifications for students;
5) Field tested materials in programs enrolling handicapped individuals.

CONTRIBUTIONS TO EDUCATION: This project sought to impact the Major Goals of Vocational Education for 1980-1981 and the specific area of Special Needs of Learners by:

1) Continuing to provide for the special needs of learners who are handicapped;

CONTRIBUTIONS TO EDUCATION (Cont.):

2) Providing curriculum materials and consultation services to health occupations programs with special needs students;
3) and Developing strategies to broaden the occupational aspirations and opportunities for handicapped individuals in health occupations education. As a result of this project teachers of health occupations education and guidance personnel will be more aware of the opportunities available to the handicapped in the health care and service field.

PRODUCTS:

This project has sought to produce the following products:

1) State of the Art Report;
2) Catalog of Opportunities;
3) Instructional Materials Package;
4) Final Report.

# CHAPTER I

## INTRODUCTION

The educational and occupational demands of handicapped populations have until recent years remained unacknowledged. However, with the passage of the Vocational Education Amendments of 1976 (P.L. 94-482) came the stipulation that persons cannot be denied admission to vocational training on the basis of sex, race, color, handicap, or national origin. Vocational programs which are recipients of federal funding must not deny admission to handicapped persons in the community on the basis of their handicapping condition. Once these individuals are enrolled in vocational training, program modifications may be made to reasonably accommodate the handicapped person without compromising program quality.

The number of handicapped people being accepted into some areas of vocational education has increased in recent years, however, the admission of handicapped persons into health occupations education and employment programs has remained sparse. The prevailing attitude seems to be that handicapped individuals are incapable of successfully completing health occupations education programs and lack the competence necessary for gainful employment in the health care and service field.

The research study which follows was designed to identify health occupations education programs currently being offered to handicapped students and health occupations positions being occupied by handicapped

employees throughout the state of Kentucky. The study was further designed in a manner that allowed assessment of the respondents attitudes toward educating and working with handicapped individuals. This report reflects the results of a twelve month endeavor relevant to these ventures. Samples of teachers and practitioners representing various health occupation areas comprised the major sources of data.

## Need For The Study

Following the passage of the 1974 and 1976 Amendments to the Vocational Education Act of 1963, increased emphasis has been placed on making programs accessible for handicapped populations. Teachers and practitioners of health occupations agree that program modifications are warranted in order to accommodate and more effectively serve students who are handicapped. In spite of this agreement, however, progress toward actually providing appropriate instruction to handicapped students continues to be slow. One factor which may be a contributor to this response is the lack of understanding of the potential and limitations of handicapped people. Many persons tend to be particularly skeptical about educating handicapped students for job placement in health occupations.

Research has been conducted in some areas of vocational education to determine what academic and employment possibilities exist for the handicapped; however, no study has been limited exclusively to health occupations. Several resources were found that pertained to the topics of handicapped and vocational education. There were no resources found specifically pertaining to handicapped and Health Occupations Education.

In many resources the health field was an area to which a piece of equipment or a specific technique could be used or modified.

"Occupational Opportunities for the Physically Handicapped" (1980) by Elaine Uthe, listed health occupations positions in which physically handicapped persons were employed. These positions were in areas that currently accept handicapped students in the preparatory program.

"Tools, Equipment and Employment of Handicapped People" (1981) is a catalog prepared by the Wisconsin Vocational Studies Center to assist in vocational education and employment of the handicapped. The catalog is a guide for modifying tools, equipment, and to commercially available equipment. Modifications for health occupations equipment is limited to thermometers and stethescopes.

Although some general interpretations may possibly be derived from applying this data to health occupations, a more thorough, specialized investigation is necessary before accurate recommendations can be made. The lack of previous research regarding health occupations education for the handicapped may account for the formation of some negative attitudes. Until there is documented evidence that handicapped students are capable of successfully completing health occupations education programs and securing gainful employment in that occupational area, many will continue to demonstrate skepticism.

Therefore, a need exists for the conduct of activities designed to identify health occupations education programs that are currently being offered to handicapped students and to identify occupation positions in which handicapped persons can be expected to equally compete with nonhandicapped people.

"Vocational Education for the Disadvantaged and Handicapped: Kentucky Needs Assessment" (1977) by Bayne, Turner and Jackson has identified several programs in health occupations that have been modified for disadvantaged and handicapped students. Four programs have been modified for handicapped persons and eight programs modified for the academically disadvantaged. It should be noted that most of the programs modified were in secondary education and were high school programs that prepare for entry level health occupations positions.

A need also exists for assessing the attitudes of both teachers and practitioners toward teaching and working with handicapped persons in order to better understand the reasons why handicapped people are so seldom admitted into health occupations programs. Results of the study will be reflected in a catalog of opportunities developed according to classifications of handicapping conditions incorporating necessary program modifications as identified by professional practitioners in the health field.

Examination of the results of this study will provide health occupations teachers and practitioners with a better understanding of the education and employment potential of handicapped people in the health care and service field. It may also serve as a basis for preparing appropriate instructional materials for special needs students and providing inservice to health occupations teachers in the strategies used with special needs students.

## Objectives

It was the objective of this study to provide information to health occupations teachers and practitioners in order to increase their awareness of the opportunities available to the handicapped in the health care and service field.

This investigation has responded to the aforementioned needs by seeking to accomplish the following objectives:

1) Assess and identify the types of occupational programs in health occupations that are available to handicapped students.

2) Prepare a catalog of opportunities according to handicap classifications with suggestions about modifications.

3) Prepare instructional materials for special needs students and package for field-testing.

4) Provide inservice to health occupations teachers in the strategies used with special needs students.

## CHAPTER II

## RESEARCH METHODS AND PROCEDURES

### Introduction

This project was conducted in four major phases: (1) review of related literature; (2) instrument development; (3) data collection; and (4) data analysis. This chapter describes phases 1, 2, and 3.

### Review of Related Literature

A comprehensive review of existing literature was conducted by the project staff during the initial phase of the study. The literature reviewed was relative to:

1. Theoretical basis of vocational education;
2. Theoretical basis of health occupations education;
3. Development of health occupations education for the handicapped;
4. Legislation pertaining to education for the handicapped;
5. Definitions of handicapped;
6. Definitions of health occupations;
7. Principles and concepts of health occupations education;
8. Goals of health occupations education;
9. Issues in vocational education for the handicapped; and
10. Research, development, implementation and evaluation of health occupations education programs.

The major resources utilized in the literature review were from the Educational Resources Information Center (RIE, AIM, ARM, and CIJE).

## Definition of Terms

Although the definition of handicapped includes many classifications of handicapping conditions, for the purpose of this study, response to the items contained in the questionnaire took into account only the handicapping conditions that are defined below. In keeping with the legal definition of "handicapped," the following definitions are from the Federal Register, (P.L. 94-482).

### Handicapped Definitions

Handicapped means a person who is mentally retarded; hard of hearing; deaf; speech impaired; visually handicapped; seriously emotionally disturbed; orthopedically impaired; or other health impaired person, or persons with specific learning disabilities; and who by reason of the above:
- requires special education and related services, and
- cannot succeed in the regular vocational education program without special educational assistance; or
- requires a modified vocational education program.

Deaf means a hearing impairment which is so severe that the individual is impaired in processing linguistic information through hearing, with or without amplification, which adversely affects educational performance.

Hard of Hearing means a hearing impairment, whether permanent or fluctuating, which adversely affects an individual's educational performance but which is not included under the definition of "deaf."

Orthopedically Impaired means a severe orthopedic impairment which adversely affects an individual's educational performance. The term includes impairments caused by congenital anomaly (e.g., clubfoot, absence of some member, etc.) impairments caused by disease (e.g., poliomyelitis, bone tuberculosis, etc.) and impairments from other causes (e.g., cerebral palsy, amputations, and fractures or burns which cause contractures).

Other Health Impaired means limited strength, vitality or alertness, due to chronic or acute health problems such as a heart condition, tuberculosis, rheumatic fever, nephritis, asthma, sickle cell anemia, hemophilia, epilepsy, lead poisoning, leukemia, or diabetes, which adversely affects an individual's educational performance.

Specific Learning Disability means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain disfunction, dyslexia, and developmental aphasia. The term does not include individuals who have learning problems which are primarily the result of visual, hearing, or motor handicaps, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage.

Speech Impaired means a communication disorder, such as stuttering, impaired articulation, a language impairment, or a voice impairment, which adversely affects an individual's educational performance.

Visually Handicapped means a visual impairment which, even with correction, adversely affects an individual's educational performance. The term includes both partially seeing and blind individuals.

The following health occupation definitions are included in the Glossary of Allied Health Occupational Titles, a resource by the American Society of Allied Health Professions; and the Occupational Outlook Handbook, a resource by the U. S. Department of Labor - Bureau of Labor Statistics.

Health Occupations Definitions

NURSING assisting the physician in bedside patient care, and providing specialty services as required by institutional and community needs.

Licensed Practical Nurse (L.P.N.): provides nursing care requiring technical knowledge but not the professional training of a registered nurse. Duties include providing much of the bedside care needed by patients, such as taking and recording temperatures and blood pressures, changing dressings, administering certain prescribed medicines, and bathing bed patients and helping them with personal hygiene.

Aide/Orderly: provides a variety of duties; most require relatively little specialized training but contribute to the comfort and care of patients. The range of duties performed includes making beds, delivering messages, counting linens, and escorting patients to other departments in the hospital. May also include, where

hospital policy permits, the taking of vital signs, and in the case of orderlies, includes performing heavier work in the nursing unit and maintaining equipment and may include setting up of traction and performing male catheterization.

DENTAL — variety of services rendered to the dentist including general office work, laboratory work, and assisting the dentist at the chairside.

Dental Hygienist (R.D.H.): professional oral health clinician and educator who helps public develop and maintain optimum oral health. Performs preventive, restorative, and therapeutic services under the supervision of a dentist.

Dental Assistant (C.D.A.): assists dentist at the chairside in dental operations, performs reception and clerical functions, and carries out dental radiography and selected dental laboratory work.

CLINICAL LABORATORY — a clinical laboratory setting of collecting, mounting, processing, classifying, and analyzing laboratory specimens.

Medical Laboratory Technician (M.L.T.): works under the supervision of a medical technologist, pathologist, or physician, in performing routine or specialized bacteriological, biological, and chemical tests, requiring limited independent judgment or correlation competency, to provide data for use in the diagnosis and evaluation of effective treatment of disease.

Laboratory Assistant (C.L.A.): works under the direct supervision of a medical technologist, pathologist, physician, or qualified scientist, in performing routine laboratory procedures requiring basic technical skills and minimal independent judgment, in chemistry, hematology, and microbiology.

RESPIRATORY — under medical direction, treatment, management, control, and performance of diagnostic evaluations in the care of patients with deficiencies and abnormalities in the cardio-pulmonary system.

Respiratory Therapist (A.R.R.T.): administers respiratory care under the direction of a physician, evaluating the patients progress, and making recommendations for respiratory therapy. Proficiencies include ventilatory therapy, cardiorespiratory rehabilitation, microenvironmental control, and diagnostic testing of the respiratory system. (Inhalation Therapist)

Inhalation Technician (C.I.T.): routinely treats patients requiring non-critical respiratory care, and recognizes and responds to a limited number of specified patient respiratory emergencies under supervision.

OPERATING ROOM — assistance to the surgeon in the operating room and provision of specialty services as required by institutional needs.

Surgical Technician (C.S.T.): works as general technical assistant on the surgical team by arranging supplies and instruments in the operating room, maintaining antiseptic conditions, preparing patients for surgery and assisting the surgeon during the operation. (Formerly operating room technician)

MEDICAL RECORDS — planning, organization and management of patient information systems and statistical reports for medical and administrative staff use and health care research.

Medical Record Technician (A.M.R.T.): serves as the skilled assistant to the medical record administrator, carrying out the technical work of coding, analyzing, and preserving patient's medical records and compiling reports, disease indices, and statistics in health care facilities.

MEDICAL/DENTAL OFFICE — work in various support capacities to assist in the management and operation of clinical offices and health facilities.

Medical Assistant (Office) (C.M.A.): assumes support functions in a physician's office, including routine administrative, clerical and record keeping procedures. Assists the physician in medical examinations and treatments, and cares for medical equipment and supplies.

RADIOLOGY — use of ionizing radiation for diagnostic, therapeutic, and research purposes.

Radiological Technician/Radiographer (A.R.R.T.): maintains and safely uses equipment and supplies necessary to demonstrate portions of the human body on X-ray film or fluroscopic screen for diagnostic purposes. May supervise and/or teach radiologic personnel. (Radiologic technologist)

## Limitations of the Study

The activities of the originally proposed project were subjected to several modifications due to time and budgetary constraints. These modifications are explained as follows:

1) There were no instruments available appropriate for the activities required for this study. Although the instruments developed for the study were field-tested, they were not subjected to rigorous tests of extensive validation and reliability characteristic of standardized measurement and data collection devices. The instruments were, however, adequate for the purposes of this study.

2) Since the data collected were obtained from mailed out instruments, it was recognized that any misinterpretations of items reflected in the responses could not be investigated.

3) It was originally proposed that as a segment of this study, instructional materials would be prepared for special needs students in health occupations education programs. However, the diversity of responses to the survey indicated a need for curriculum modifications in many health occupations education areas. Due to the time constraints placed on the project, the accomplishment of this task could not be achieved. The necessity for modifications based not only on occupational areas but also on handicapping conditions and ensuing limitations made the objective even more unattainable.

4) Due to budgetary and other constraints, when selecting the sample population for the practitioner group the project staff was unable to gain access to adequate name and address lists as found in records of licensure, registration, and certification. Therefore, membership in professional organizations was used as a criteria for practitioner selection and participation.

5) The preparation of a catalog of opportunities according to handicap classifications with suggestions about modifications was hindered by difficulty experienced in data collection. The barriers encountered in dealing with non-respondents appeared to result from the low level of general interest and attitude of the research sample. Evidence of the lack of cooperation was reflected in the poor response rate. However, a fragmented list of opportunities has been presented in this report. Some of the modifications identified by practitioners may be found in Appendix in conjunction with the unsolicited responses.

6) The bibliography search revealed a definite lack of appropriate information available for use by persons modifying health occupations education programs for the handicapped. Because of the lack of previous research in the health occupations area, the project staff had no recourse but to adapt materials from other vocational education areas. Although these materials did not accommodate all the needs of the investigation, they were adequate as general resources.

7) It was originally proposed that inservice be provided to health occupations teachers in the strategies used with special needs students. This inservice, recognized as a vital tool in the program modification process, cannot be provided until a total needs assessment has been completed delineating the areas in which assistance is needed. Once this assessment has been completed, recommendations on conducting inservice training for teachers can be made.

Sample

The population for this study involved teachers of health occupations programs and practitioners of health occupations specialties in the Commonwealth of Kentucky. Teachers of health occupations were defined as those people who teach Health Careers and Services in public secondary schools, long term adult programs in Health Occupations at state vocational-technical schools, and post-secondary Health Occupations programs in community colleges. The Kentucky Vocational Education Directory provided the list of teachers in health occupations programs, in public secondary schools and state vocational-technical schools. The Dean of Instruction in each community college provided the list of teachers of health occupations at the community college level. The sample of teachers was the total population of teachers.

Practitioners were defined as those individuals who had completed or graduated from an approved program of health occupations education and were credentialed or certified to practice in their health occupations specialty. Since not all health occupations are licensed, registered or certified by the state, it became necessary to add membership in a professional organization to the definition as a criteria for participation. The organizational membership list then provided names of possible participants for the practitioner group. The sample of practitioners was randomly selected from the eight professional organization membership lists with each health specialty being represented.

Instrument

A review of previously conducted studies revealed that an instrument appropriate for this study was not available. Therefore an instrument was developed by the project staff. Following a pilot study and adaptation of

suggested and/or appropriate revisions, the instrument was considered adequate for the purpose of this specific study.

Collection of Data

The data obtained in this study were collected through a mail survey. Questionnaires were mailed to the previously identified sample of teachers and practitioners in the Commonwealth of Kentucky. One thousand six hundred forty-nine questionnaires were mailed. There were 383 responses to the initial and follow-up mailing of the questionnaire. This equaled a 23 percent response rate for the total sample. A non-respondent study was attempted, however, the response rate achieved was less than the response to the initial mailing; therefore, the attempt was abandoned.

Data Analysis

The information obtained on the questionnaire was recorded on a coding form developed specifically for this study and then key punched onto cards for computer analysis. The computer program was designed to analyze the selections by teachers and practitioners separately and then as a total group. Each handicapping condition was related to or identified with a health occupations education program or position.

## CHAPTER III

## ANALYSIS OF DATA

This section of the report will collectively present data gathered from the "Survey of Occupational Opportunities in Health Occupations for Handicapped" as reported by teachers, and the "Survey of Occupational Opportunities in Health Occupations for Handicapped" as reported by practitioners.

The combined sample size for teachers and practitioners was 1,649. Of those 1,649 to whom instruments were administered, 383 responded by completing and returning the questionnaire to the project staff. This total number represented a 23 percent response rate. Specific return rates per teacher and practitioner sample are presented in Table 1.

TABLE 1

INSTRUMENT RETURN RATE FOR TEACHER AND PRACTITIONER SAMPLES

| Group | # Instruments Disseminated | # Instruments Returned | % Returned |
|---|---|---|---|
| Teachers | 229 | 87 | 38% |
| Practitioners | 1420 | 297 | 20% |
| Total | 1649 | 383 | 23% |

### Characteristics of the Sample

Of the reporting teachers, approximately 46 percent indicated nursing as their area of primary responsibility, followed by 19.5

TABLE 2

AREA OF PRIMARY RESPONSIBILITY

| | Nursing | Dental | Medical Laboratory | Respiratory | Surgical Technician | Medical Records | Medical Assistant | Radiology | Other |
|---|---|---|---|---|---|---|---|---|---|
| TEACHERS* | | | | | | | | | |
| Frequency | 40 | 9 | 5 | 5 | 5 | 1 | 1 | 2 | 17 |
| Percent | 46% | 10.3% | 5.7% | 5.7% | 5.7% | 1.1% | 1.1% | 2.3% | 19.5% |
| (*Missing Data 2.6%) | | | | | | | | | |
| PRACTITIONERS* | | | | | | | | | |
| Frequency | 66 | 64 | 38 | 22 | 6 | 29 | 9 | 29 | 7 |
| Percent | 22.3% | 21.6% | 12.8% | 7.4% | 2% | 9.8% | 3% | 9.8% | 2.4% |
| (*Missing Data 8.9%) | | | | | | | | | |

percent who fell into the category designated as "Other". Practitioners reported nursing and dental as areas of primary responsibility at 22.3 percent and 21.6 percent respectively. See Table 2.

Table 3 presents data relative to the educational preparation of both groups surveyed. The most frequently indicated preparation level by teacher respondents was a Bachelor's Degree (24.1%), however as Table 3 shows, nearly one-third of the teacher group gave no response. Vocational Certification was the most frequently indicated level of preparation by the practitioner group (36.8%).

TABLE 3

EDUCATIONAL PREPARATION
OF RESPONDENTS

| | Vocational Certification | Associate Degree | Bachelor's Degree | Master's Degree or above | Other |
|---|---|---|---|---|---|
| TEACHERS* | | | | | |
| Frequency | 12 | 13 | 21 | 8 | 5 |
| Percent | 13.8% | 14.9% | 24.1% | 9.2% | 5.7% |
| (*Missing Data 32.3%) | | | | | |
| PRACTITIONERS* | | | | | |
| Frequency | 109 | 50 | 50 | 19 | 34 |
| Percent | 36.8% | 16.9% | 16.9% | 6.4% | 11.5% |
| (*Missing Data 11.5%) | | | | | |

Of the responding teachers, 33.3 percent reported having 6 to 10 years of teaching experience, followed by 24.1 percent who reported having 1 to 5 years of experience. Of the responding practitioners, 34.8 percent reported having 1 to 5 years of professional experience followed by 24.3 percent who reported having 16 or more years of experience. See Table 4.

TABLE 4

YEARS OF EXPERIENCE
(PRACTICE AND/OR TEACHING)

| | 1-5 years | 6-10 years | 11-15 years | 16 or more years |
|---|---|---|---|---|
| TEACHERS* | | | | |
| Frequency | 21 | 29 | 16 | 20 |
| Percent | 24.1% | 33.3% | 18.4% | 23% |
| (*Missing Data 1.2%) | | | | |
| PRACTITIONERS* | | | | |
| Frequency | 103 | 67 | 35 | 72 |
| Percent | 34.8% | 22.6% | 11.8% | 24.3% |
| (*Missing Data 6.5%) | | | | |

Approximately 61 percent of the responding teachers indicated having had some experience in teaching handicapped individuals. Thirty-one percent had no experience and 6.9 percent had a considerable amount of experience. Of the responding practitioners, 46.3 percent had some experience working with handicapped individuals while 43.9 percent had no experience and 4.4 percent had considerable experience. See Table 5.

TABLE 5

EXPERIENCE WORKING WITH
OR TEACHING THE HANDICAPPED

| | NONE | SOME | CONSIDERABLE |
|---|---|---|---|
| TEACHERS* | | | |
| Frequency | 27 | 53 | 6 |
| Percent | 31% | 60.9% | 6.9% |
| (*Missing Data 1.2%) | | | |
| PRACTITIONERS* | | | |
| Frequency | 130 | 137 | 13 |
| Percent | 43.9% | 46.3% | 4.4% |
| (*Missing Data 5.4%) | | | |

Table 6 shows the frequency of selection, percent of frequency, and ranking of responses by the teachers and practitioners to the following question:

> WHAT HEALTH OCCUPATIONS PROGRAMS/POSITIONS ARE CURRENTLY BEING OFFERED TO/OCCUPIED BY HANDICAPPED INDIVIDUALS IN YOUR SCHOOL OR COMMUNITY?

The responses of the teachers indicated that all of the listed health occupations programs were being offered to handicapped and disadvantaged in the state vocational-technical schools, secondary schools and/or community colleges.

Teachers also indicated that programs in nursing, aide/orderly and practical nursing are most commonly offered to handicapped and disadvantaged. The selection of "Other" would indicate the entry

TABLE 6

HEALTH OCCUPATIONS PROGRAMS/POSITIONS CURRENTLY
OFFERED TO/OCCUPIED BY HANDICAPPED
Ranked by Frequency and Percentage of Selection

| PROGRAM OR POSITION | TEACHERS | | | PRACTITIONERS | | | TOTAL GROUP | | |
|---|---|---|---|---|---|---|---|---|---|
| | Freq. | % | Rank | Freq. | % | Rank | Freq. | % | Rank |
| Licensed Practical Nurse | 33 | 37.9 | 1.5 | 24 | 8.1 | 6 | 57 | 14.9 | 3 |
| Aide/Orderly | 33 | 37.9 | 1.5 | 55 | 18.6 | 2 | 88 | 23 | 1 |
| Dental Hygienist | 5 | 5.7 | 9 | 4 | 1.4 | 12.5 | 9 | 2.3 | 13 |
| Dental Assistant | 8 | 9.2 | 6 | 10 | 3.4 | 10 | 18 | 4.7 | 10 |
| Medical Laboratory Technician | 7 | 8 | 7.5 | 28 | 9.5 | 4 | 35 | 9.1 | 5 |
| Laboratory Assistant | 2 | 2.3 | 13 | 21 | 7.1 | 7 | 23 | 6 | 8 |
| Respiratory Therapist | 10 | 11.5 | 5 | 11 | 3.7 | 9 | 21 | 5.5 | 9 |
| Inhalation Technician | 3 | 3.4 | 11.5 | 7 | 2.4 | 11 | 10 | 2.6 | 12 |
| Surgical Technician | 11 | 12.6 | 4 | 4 | 1.4 | 12.5 | 15 | 3.9 | 11 |
| Medical Records Technician | 3 | 3.4 | 11.5 | 34 | 11.5 | 3 | 37 | 9.7 | 4 |
| Medical Assistant-Office | 4 | 4.6 | 10 | 26 | 8.8 | 5 | 30 | 7.8 | 6 |
| Radiographer/Radiological Technician | 7 | 8 | 7.5 | 18 | 6.1 | 8 | 25 | 6.5 | 7 |
| Other | 13 | 14.9 | 3 | 56 | 18.9 | 1 | 69 | 18 | 2 |

or basic level for nursing. The classification "Other" would include the health careers-services programs at the high school level which may be aide/orderly level preparation.

The practitioner responses indicated that handicapped and disadvantaged persons are occupying positions in health occupations at all levels. They are most frequently occupying the entry level positions of aide/orderly or the classification of "Other". The responses also indicated that positions at the technical level would be in the areas where mobility and or patient contact is limited such as medical laboratory technician and medical records technician.

The responses of the combined group, teachers and practitioners, indicated that handicapped and disadvantaged are currently offered education and employment in health occupations at the basic entry level areas of aide/orderly and "Other" as meaning high school preparation at aide/orderly level. The responses indicated that the next most common education programs and positions are in Licensed Practical Nursing and Medical Records Technician.

It would appear that the teacher group indicated health occupations programs currently being offered in their specific school, and not the programs specifically offered for the handicapped and disadvantaged. It should also be noted that "mainstreaming" of handicapped and disadvantaged has been encouraged at the secondary level of education. Presently the most frequently offered programs in health occupations education, at the state vocational-technical schools and secondary schools, are in Licensed Practical Nursing, nursing aide/orderly and health careers-services. The many offerings

of programs in the nursing area would also account for the high ranking of nursing programs in the teacher selections.

The practitioners answered this question in a manner that appeared protective of the "status quo". The handicapped and disadvantaged are occupying positions at the entry level (lowest level) of preparation. The classification of "Other" has been designated as the lowest health care option and similar to the aide/orderly level. The next positions, indicated by the practitioners for which the handicapped and disadvantaged were hired, were in Licensed Practical Nursing and Medical Record Technician. These selections might also indicate that these areas are the only health occupations programs presently accepting handicapped and disadvantaged persons.

The combined group indicated selections most like the practitioner responses. This is usually true with unequal groups when one group is larger than the other group and no adjustment is made for size.

Table 7 shows the responses of the teachers and practitioners to the survey question:

WHAT HEALTH OCCUPATIONS PROGRAMS/POSITIONS ARE MOST FREQUENTLY SELECTED AND APPLIED FOR BY THE HANDICAPPED?

Selections by teachers indicated that handicapped and disadvantaged persons most frequently applied to programs in the nursing field. The most frequently applied for programs were identified as aide/orderly and Licensed Practical Nurse. The broad category of "Other" was indicated as the third most frequently applied for program and Surgical Technician was fourth.

Practitioners indicated that the positions most frequently applied for by the handicapped and disadvantaged were at the aide/orderly level

TABLE 7

HEALTH OCCUPATIONS PROGRAMS/POSITIONS MOST FREQUENTLY
SELECTED/APPLIED FOR BY HANDICAPPED
Ranked by Frequency and Percentage of Selection

| PROGRAM OR POSITION | TEACHERS | | | PRACTITIONERS | | | TOTAL GROUP | | |
|---|---|---|---|---|---|---|---|---|---|
| | Freq. | % | Rank | Freq. | % | Rank | Freq. | % | Rank |
| Licensed Practical Nurse | 17 | 19.5 | 2 | 6 | 2 | 8 | 23 | 6 | 5 |
| Aide/Orderly | 20 | 23 | 1 | 52 | 17.6 | 1 | 72 | 18.8 | 1 |
| Dental Hygienist | 0 | 0 | 11 | 3 | 1 | 10.5 | 3 | 0.8 | 11.5 |
| Dental Assistant | 1 | 1.1 | 7 | 10 | 3.4 | 6 | 11 | 2.9 | 7 |
| Medical Laboratory Technician | 1 | 1.1 | 7 | 8 | 2.7 | 7 | 9 | 2.3 | 8 |
| Laboratory Assistant | 0 | 0 | 11 | 19 | 6.4 | 5 | 19 | 5 | 6 |
| Respiratory Therapist | 1 | 1.1 | 7 | 1 | 0.3 | 12.5 | 2 | 0.5 | 13 |
| Inhalation Technician | 0 | 0 | 11 | 3 | 1 | 10.5 | 3 | 0.8 | 11.5 |
| Surgical Technician | 3 | 3.4 | 4 | 1 | 0.3 | 12.5 | 4 | 1 | 9.5 |
| Medical Records Technician | 0 | 0 | 11 | 34 | 11.5 | 3 | 34 | 8.9 | 3 |
| Medical Assistant-Office | 2 | 2.3 | 5 | 27 | 9.1 | 4 | 29 | 7.6 | 4 |
| Radiographer/Radiological Technician | 0 | 0 | 11 | 4 | 1.4 | 9 | 4 | 1 | 9.5 |
| Other | 8 | 9.2 | 3 | 45 | 15.2 | 2 | 53 | 13.5 | 2 |

and in the broad category of "Other". The position ranking as third most frequently applied for was indicated by the practitioners as being Medical Records Technician and Medical Assistant-Office was ranked fourth.

Selections of the combined group indicated that the most frequently applied for programs and positions were in the aide/orderly area and the broad area of "Other". The programs/positions of Medical Records Technician ranked third and Medical Assistant-Office was ranked fourth.

Teacher selections indicated that handicapped and disadvantaged persons most frequently apply for and select programs in the nursing area. This may result from the impression that health occupations education means nursing, physicians, and dentists. It is also possible that teachers answered the questions based on programs offered at their specific school and general student application to these programs. It should also be noted that many times the teacher does not see the actual application of the student, the counselor simply states that the student will be admitted to the program in nursing.

The practitioners selections indicated that handicapped and disadvantaged persons apply for the low level or entry level positions in the nursing area or the broad category of "Other". This may reflect a limited understanding of the possible ability level of the handicapped and disadvantaged, a limited knowledge about various health occupations positions, or perhaps even an attempt to maintain a "status quo" and protect their specific health area. The broad category of "Other", although intended to mean health careers-services or the unidentified health areas, may have also been interpreted as meaning areas other than in the health field.

Selections of the combined group are similar to selections of the larger practitioner group. The basis of interpretation relates to the larger or more dominant of the two groups when group sizes are uneven.

The respondents answered the third question of the survey in the manner indicated on Table 8.

WHICH HEALTH OCCUPATIONS PROGRAMS/POSITIONS ARE HANDICAPPED ADMITTED TO/HIRED TO FILL MOST FREQUENTLY?

Selections by teachers identified programs to which handicapped and disadvantaged are most frequently admitted as being in the nursing area. The aide/orderly programs ranked first and Licensed Practical Nurse programs were ranked second. Teachers also identified the broad category of "Other" as ranking third and the two categories of Respiratory Therapy and Surgical Technician ranked fourth.

Practitioners identified the type of position for which handicapped and disadvantaged are hired to fill most frequently as the aide/orderly level. The broad category of "Other" ranked second. The Medical Records Technician position ranked third and Laboratory Assistant was ranked fourth.

Selections by the combined group again correspond with selections by the practitioners. The aide/orderly positions ranked first, the broad category of "Other" was second, and Medical Records Technician and Laboratory Assistant ranked third and fourth.

Selections by teachers may reflect programs offered at their school as these are the programs to which their students are admitted. Their responses do not indicate a concern for the handicapped individual,

TABLE 8

HEALTH OCCUPATIONS PROGRAMS/POSITIONS TO WHICH
HANDICAPPED ARE ADMITTED/HIRED
Ranked by Frequency and Percent of Selection

| PROGRAM OR POSITION | TEACHERS | | | PRACTITIONERS | | | TOTAL GROUP | | |
|---|---|---|---|---|---|---|---|---|---|
| | Freq. | % | Rank | Freq. | % | Rank | Freq. | % | Rank |
| Licensed Practical Nurse | 13 | 14.9 | 2 | 6 | 2 | 8 | 19 | 5 | 6 |
| Aide/Orderly | 24 | 27.6 | 1 | 54 | 18.2 | 1 | 78 | 20.4 | 1 |
| Dental Hygienist | 0 | 0 | 10.5 | 2 | 0.7 | 11 | 2 | 0.5 | 13 |
| Dental Assistant | 0 | 0 | 10.5 | 9 | 3 | 7 | 9 | 2.3 | 8 |
| Medical Laboratory Technician | 1 | 1.1 | 6.5 | 11 | 3.7 | 6 | 12 | 3.1 | 7 |
| Laboratory Assistant | 0 | 0 | 10.5 | 25 | 8.4 | 4 | 25 | 6.5 | 4 |
| Respiratory Therapist | 2 | 2.3 | 4.5 | 1 | 0.3 | 12.5 | 3 | 0.8 | 11 |
| Inhalation Technician | 0 | 0 | 10.5 | 4 | 1.4 | 9 | 4 | 1 | 9 |
| Surgical Technician | 2 | 2.3 | 4.5 | 1 | 0.3 | 12.5 | 3 | 0.8 | 11 |
| Medical Records Technician | 1 | 1.1 | 6.5 | 33 | 11.1 | 3 | 34 | 8.9 | 3 |
| Medical Assistant-Office | 0 | 0 | 10.5 | 23 | 7.8 | 5 | 23 | 6 | 5 |
| Radiographer/Radiological Technician | 0 | 0 | 10.5 | 3 | 1 | 10 | 3 | 0.8 | 11 |
| Other | 7 | 8 | 3 | 50 | 16.9 | 2 | 57 | 14.9 | 2 |

the requirements of the 'job', or the possible ability of the student to handle the job. In addition, lack of awareness of the types of careers available in health occupations education is evident by the ranking of programs.

Selections by practitioners may reflect positions in which handicapped individuals are working in their local area, therefore these are the positions indicated for which they are hired most frequently. Selections by practitioners appear to indicate a lack of awareness in the abilities of handicapped and disadvantaged individuals. In addition, selections by some practitioners manifested a misunderstanding or misconception of career areas other than their own.

Table 9 shows the responses to the following question on the survey.

WHICH HEALTH OCCUPATIONS PROGRAMS/POSITIONS ARE SUCCESSFULLY COMPLETED/OCCUPIED BY HANDICAPPED INDIVIDUALS?

Selections by teachers indicated that handicapped and disadvantaged persons have been able to successfully complete programs most frequently in the nursing areas. Programs for aide/orderly, Licensed Practical Nurse, and the broad category of "Other" were ranked one, two and three respectively. Programs for Surgical Technician and Dental Assistant were ranked fourth.

Selections by practitioners indicated that handicapped and disadvantaged are successfully occupying positions in the aide/orderly categories. The broad category of "Other" was ranked number one and the aide/orderly category was ranked number two. Practitioners ranked

TABLE 9

HEALTH OCCUPATIONS PROGRAM/POSITIONS SUCCESSFULLY
COMPLETED/OCCUPIED BY HANDICAPPED
Ranked by Frequency and Percentage of Selection

| PROGRAM OR POSITION | TEACHERS | | | PRACTITIONERS | | | TOTAL GROUP | | |
|---|---|---|---|---|---|---|---|---|---|
| | Freq. | % | Rank | Freq. | % | Rank | Freq. | % | Rank |
| Licensed Practical Nurse | 17 | 9.5 | 2 | 16 | 5.4 | 7 | 33 | 8.6 | 4 |
| Aide/Orderly | 22 | 25.3 | 1 | 45 | 15.4 | 2 | 67 | 17.5 | 1 |
| Dental Hygienist | 1 | 1.1 | 7.5 | 8 | 2.7 | 10 | 9 | 2.3 | 10 |
| Dental Assistant | 2 | 2.3 | 4.5 | 12 | 4.8 | 9 | 14 | 3.7 | 9 |
| Medical Laboratory Technician | 1 | 1.1 | 7.5 | 25 | 8.4 | 5 | 26 | 6.8 | 6 |
| Laboratory Assistant | 0 | 0 | 11.5 | 28 | 9.5 | 4 | 28 | 7.3 | 5 |
| Respiratory Therapist | 1 | 1.1 | 7.5 | 5 | 1.7 | 11.5 | 6 | 1.6 | 11 |
| Inhalation Technician | 0 | 0 | 11.5 | 5 | 1.7 | 11.5 | 5 | 1.3 | 12 |
| Surgical Technician | 2 | 2.3 | 4.5 | 2 | 0.7 | 13 | 4 | 1 | 13 |
| Medical Records Technician | 0 | 0 | 11.5 | 35 | 11.8 | 3 | 35 | 9.1 | 3 |
| Medical Assistant-Office | 1 | 1.1 | 7.5 | 24 | 8.1 | 6 | 25 | 6.5 | 7 |
| Radiographer/Radiological Technician | 0 | 0 | 11.5 | 15 | 5.1 | 8 | 15 | 3.9 | 8 |
| Other | 8 | 9.2 | 3 | 49 | 16.6 | 1 | 57 | 14.9 | 2 |

positions in Medical Records Technician as third and Laboratory Assistant as fourth.

Selections by the combined group of teachers and practitioners identified positions or programs successfully completed or occupied by handicapped and disadvantaged persons as aide/orderly ranked number one, and the category of "Other" ranked number two. The positions of Medical Records Technician and Licensed Practical Nurse ranked third and fourth.

Responses by teachers seemed to be consistent in that they were made on the basis of programs in specific teaching situations and not necessarily as a result of having or not having handicapped and disadvantaged students. Again, the broad area of nursing was identified as the program most likely to be successfully completed. This could result from nursing being the only health occupations program accepting handicapped and disadvantaged students or because it is the only program offered at a particular school. Selections made by teachers also seemed to take into consideration the public or patient contact aspect of health occupations and only those positions or programs requiring limited contact or responsibility were highly ranked. Selections of teachers also seemed to indicate limited knowledge about health careers other than their own specific areas.

Selections by practitioners again seemed to reflect a preservation of occupations. The positions ranked most highly were those at the basic and entry level or those requiring very little public or patient contact. The selections also indicated a lack of understanding regarding the ability and potential of handicapped and disadvantaged persons; as

well as a lack of awareness of the various roles and functions of health occupations positions other than their own.

Selections by the combined group again were similar to practitioners selections but seemed to vary slightly when ranked. The categories for aide/orderly, "Other", and Medical Records Technician remained number one, two and three, as with the practitioner rankings, but Licensed Practical Nursing ranked fourth. This variation may have resulted from the collective opinion that the nursing area is one area that accepts handicapped students. The selections still indicate that teachers and practitioners are not aware of the ability and potential of handicapped people, or of the many opportunities in the field of health other than their own specialty area.

The responses about equal competition by the handicapped are shown in Table 10.

IN WHICH HEALTH OCCUPATIONS PROGRAMS/POSITIONS CAN THE FOLLOWING HANDICAPPED INDIVIDUALS BE EXPECTED TO COMPETE EQUALLY WITH NON-HANDICAPPED INDIVIDUALS WITHOUT PROGRAM/ JOB MODIFICATIONS?

Deaf. Selections by teachers indicated that people who are deaf should be able to compete with non-deaf individuals on an equal basis in the program or position of Laboratory Assistant. The areas of Radiology Technician and the broad category of "Other" was ranked second. The programs/positions of aide/orderly, Medical Records Technician, and Dental Assistant were ranked fifth.

Practitioners indicated that people who are deaf could compete with non-deaf individuals successfully in the position of Medical Records Technician. The positions of Laboratory Assistant ranked

TABLE 10

HEALTH OCCUPATIONS PROGRAMS/POSITIONS IN
WHICH HANDICAPPED CAN COMPETE EQUALLY
WITHOUT PROGRAM/JOB MODIFICATIONS
As Ranked by Teachers and Practitioners

| PROGRAM OR POSITION | DEAF | | HARD OF HEARING | | ORTHOPED. IMPAIRED | | OTHER HLTH IMPAIRED | | SP. LRN'G DISABILITY | | SPEECH IMPAIRED | | VISUALLY HANDICAPPED | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Teac | Prac | Teac | Prac | Teac | Prac | Teac | Prac | Teac | Prac | Teac | Prac | Teac | Prac |
| Licensed Practical Nurse | 10 | 12.5 | 2 | 10 | 1 | 11 | 1 | 9 | 2.5 | 12.5 | 2 | 13 | 1 | 10 |
| Aide/Orderly | 5 | 7.5 | 1 | 5.5 | 2.5 | 12 | 2 | 5 | 1 | 1 | 1 | 4 | 2 | 2 |
| Dental Hygienist | 10 | 5 | 10 | 4 | 8.5 | 5 | 7 | 6 | 8.5 | 7 | 8.5 | 10.5 | 7.5 | 8.5 |
| Dental Assistant | 5 | 6 | 4.5 | 5.5 | 8.5 | 6 | 11 | 3.5 | 5.5 | 3 | 11.5 | 5.5 | 11 | 6.5 |
| Medical Laboratory Technic. | 7.5 | 3 | 7 | 3 | 4.5 | 3 | 11 | 3.5 | 12 | 10.5 | 8.5 | 3 | 11 | 12.5 |
| Laboratory Assistant | 1 | 2 | 7 | 1.5 | 6 | 2 | 7 | 1 | 8.5 | 4 | 4.5 | 1.5 | 11 | 4.5 |
| Respiratory Technician | 10 | 11 | 9 | 9 | 8.5 | 9 | 4 | 12.5 | 12 | 10.5 | 11.5 | 12 | 7.5 | 11 |
| Inhalation Technician | 13 | 10 | 13 | 11 | 11.5 | 10 | 13 | 12.5 | 12 | 8.5 | 13 | 10.5 | 11 | 4.5 |
| Surgical Technician | 12 | 12.5 | 11.5 | 13 | 13 | 13 | 7 | 10.5 | 5.5 | 12.5 | 6.5 | 8 | 5 | 12.5 |
| Medical Records Technician | 5 | 1 | 4.5 | 1.5 | 2.5 | 1 | 7 | 2 | 10 | 6 | 3 | 1.5 | 5 | 6.5 |
| Medical Assistant-Office | 7.5 | 9 | 11.5 | 8 | 8.5 | 4 | 7 | 7 | 5.5 | 5 | 10 | 5.5 | 5 | 8.5 |
| Radiographer/Rad. Technic. | 2.5 | 7.5 | 3 | 7 | 11.5 | 7 | 11 | 8 | 5.5 | 8.5 | 6.5 | 7 | 11 | 3 |
| Other | 2.5 | 4 | 7 | 12 | 4.5 | 8 | 3 | 10.5 | 2.5 | 2 | 4.5 | 9 | 3 | 1 |

second and Medical Laboratory Technician ranked third. The broad category of "Other" ranked fourth.

Hard of Hearing. Teachers indicated that a person who was hard of hearing should be able to compete with non-handicapped most frequently in the area of nursing. The programs/positions for aide/orderly were ranked number one, and programs/positions for Licensed Practical Nurse ranked number two. Teachers identified programs/positions in the area of Radiology Technician as third and Dental Assistant programs/positions were ranked fourth.

Practitioners indicated that a hard of hearing individual would be able to compete successfully with a non-handicapped person in the programs/positions of Medical Records Technician and Laboratory Assistant. Practitioners ranked Medical Laboratory Technician third and the positions/programs of Dental Hygienist were ranked fourth.

Orthopedically Impaired. Teachers indicated that persons with orthopedic impairements were successfully competing most frequently in the area of nursing. They further indicated that programs/positions for Licensed Practical Nurse ranked number one. The aide/orderly programs/positions and Medical Records Technician ranked second and programs/positions for Medical Laboratory Technician and the broad category of "Other" ranked fourth.

Selections by practitioners indicated that programs/positions for Medical Records Technician were ranked first. Laboratory Assistant programs/positions were ranked second and Medical Laboratory Technicians were third. The programs/positions for Medical Office Assistant ranked fourth.

Other Health Impairments. Teachers indicated that individuals with other health impairments were competing successfully in the positions/programs in the area of nursing. The programs/positions of Licensed Practical Nurse were ranked number one. The programs/positions for aide/orderly ranked second and the broad category of "Other" was ranked third. Teachers ranked the program/positions of Respiratory Therapist as fourth.

Practitioners indicated that people with other health impairments were competing successfully in the position/programs for Laboratory Assistant. Practitioners ranked positions/programs for Medical Records Technician as second and positions/programs for Dental Assistant and Medical Laboratory Technician were ranked third.

Specific Learning Disabilities. Teachers indicated that people with a specific learning disability could compete equally with non-handicapped people most successfully in the area of nursing. Teachers ranked the programs/positions for aide/orderly as first. The programs/positions for Licensed Practical Nurse and the broad category of "Other" were ranked second. Teachers ranked the programs/positions for Dental Assistant, Surgical Technician, Medical Office Assistant and Radiology Technician as fifth.

Practitioners indicated that people with a specific learning disability could be most successful in competition with non-handicapped in positions/programs for aide/orderly. The broad category of "Other" was ranked second. The practitioners also ranked Dental Assistant as third and Laboratory Assistant was ranked fourth.

Speech Impairment. Teachers indicated that a person with a speech impairment could compete equally with a non-handicapped individual successfully in programs/positions in the area of nursing. Programs/positions for the aide/orderly were ranked number one and the Licensed Practical Nurse programs/positions ranked second. The teachers ranked programs/positions for Medical Records Technician third, with Laboratory Assistant and the broad category of "Other" being ranked fourth.

Practitioners selections indicated that people with speech impairments could compete equally in the positions/programs of Laboratory Assistant and Medical Records Technician. The positions/programs of Medical Laboratory Technician were ranked third and the aide/orderly level was ranked fourth.

Visually Handicapped. The teachers indicated that a person who was visually handicapped could compete successfully with the non-handicapped in programs/positions in the nursing field. Programs/positions for Licensed Practical Nurse were ranked first. The aide/orderly programs/positions were ranked second and the broad category of "Other" was ranked third. The programs/positions for Surgical Technician, Medical Records Technician and Medical Office Assistant were ranked fourth.

Practitioners indicated that visually handicapped people should be able to compete successfully in the broad category of "Other". The selections ranked positions/programs for aide/orderly as second and Radiology Technician was ranked third. The practitioners further ranked positions/programs for Laboratory Assistant and Inhalation Technician as fourth.

Selections by the teachers on this question left little doubt as to the lack of interest and awareness for the difficulties of handicapped students. There does not appear to have been consideration or concern as to the program or position requirements when selections were made. In one or two instances, the teachers tried to indicate use of other learning stimuli, but this was completely overlooked in other areas. A good example of this is the selection of opportunities for deaf individuals. The teachers selected areas in which they felt other means of stimuli were important--Laboratory Assistant. In the same category, teachers did not seem as perceptive for hard of hearing individuals and areas requiring high listening and verbal skills--aide/orderly and Licensed Practical Nurse--were selected. The same inconsistencies were observed in each handicap situation. People with orthopedic handicaps were listed for high mobility and exertion occupations. The teachers did not seem to equate intelligence and/or ability to learn with handicaps. The selections were made seemingly on the basis of the physical handicap or physical activity involved.

Practitioner selections indicated a lack of concern and interest in the handicapped, as well as a lack of awareness about other areas in the health care and service field. It would seem that practitioners were more interested in protecting their own specialization and not in preparing others to work in the area. For example, practitioners identified the position of Medical Records Technician as a successful area for the deaf and hard of hearing, as well as for other handicapping conditions. This position requires high listening skills in addition to other types of skills.

The frequent selection of low level positions indicated that practitioners are really not interested in preparing others for their health field. Practitioners also selected the broad category of "Other" as an area for handicapped individuals. This could be interpreted as other health careers, or other fields not related to health.

Selections for the combined group of teachers and practitioners usually followed the selections of practitioners because of the larger sized group. The teacher group may have influenced the combined group selections only when the practitioners were undecided. Generally speaking the influence of teachers on the total group was not sufficient to make a significant difference. The selections show neither concern for the requirements of the job nor for the abilities and restriction of the handicapped individual.

Table 11 shows the responses of the teachers and practitioners in relation to equal competition with program/job modifications.

IN WHICH HEALTH OCCUPATIONS PROGRAMS/POSITIONS CAN INDIVIDUALS WITH THE FOLLOWING HANDICAPS BE EXPECTED TO COMPETE EQUALLY WITH NON-HANDICAPPED INDIVIDUALS IF PROGRAM/JOB MODIFICATIONS ARE MADE?

Deaf with Modifications. Selections by teachers indicated that a deaf individual could compete successfully in programs for the aide/orderly. The broad category of "Other" was ranked second and programs for Dental Hygienist were ranked third. Teachers further ranked programs for Dental Assistant, Medical Laboratory Technician, Laboratory Assistant and Medical Records Technician as fourth.

Practitioners ranked positions for Laboratory Assistant as number one. The positions for Medical Records Technician was ranked second and Dental Assistant ranked third. Positions for Medical Laboratory Technician was ranked fourth.

TABLE 11

HEALTH OCCUPATIONS PROGRAMS/POSITIONS IN
WHICH HANDICAPPED CAN EQUALLY COMPETE
WITH PROGRAM/JOB MODIFICATIONS
As Ranked by Teachers and Practitioners

| PROGRAM OR POSITION | DEAF | | HARD OF HEARING | | ORTHOPED. IMPARIED | | OTHER HLTH IMPAIRMENT | | SP. LRN'G DISABILITY | | SPEECH IMPAIRED | | VISUALLY HANDICAPPED | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Teac | Prac | Teac | Prac | Teac | Prac | Teac | Prac | Teac | Prac | Teac | Prac | Teac | Prac |
| Licensed Practical Nurse | 9 | 13 | 2 | 10 | 7 | 12 | 2 | 12 | 2 | 13 | 2.5 | 13 | 2 | 12.5 |
| Aide/Orderly | 1 | 5 | 1 | 4 | 3.5 | 11 | 1 | 7 | 1 | 1 | 1 | 5 | 1 | 3.5 |
| Dental Hygienist | 3 | 7 | 9 | 6 | 9.5 | 6 | 8.5 | 6 | 10 | 9 | 9 | 8 | 11.5 | 9 |
| Dental Assistant | 5.5 | 3 | 3.5 | 3 | 8 | 5 | 8.5 | 5 | 3 | 2 | 7.5 | 3 | 9 | 5.5 |
| Medical Laboratory Technic. | 5.5 | 4 | 7 | 5 | 6 | 3 | 12 | 4 | 12 | 11 | 10 | 4 | 11.5 | 11 |
| Laboratory Assistant | 5.5 | 1 | 3.5 | 1 | 3.5 | 2 | 6 | 2 | 6.5 | 3 | 5 | 2 | 7 | 5.5 |
| Respiratory Therapist | 12 | 11.5 | 12.5 | 12 | 11.5 | 10 | 8.5 | 10.5 | 9 | 10 | 12.5 | 12 | 11.5 | 10 |
| Inhalation Technician | 13 | 10 | 12.5 | 9 | 11.5 | 9 | 12 | 10.5 | 6.5 | 7 | 12.5 | 10 | 7 | 8 |
| Surgical Technician | 11 | 11.5 | 11 | 13 | 13 | 13 | 12 | 13 | 6.5 | 12 | 7.5 | 11 | 7 | 12.5 |
| Medical Records Technic. | 5.5 | 2 | 7 | 2 | 1.5 | 1 | 5 | 1 | 12 | 5 | 2.5 | 1 | 4 | 1 |
| Medical Assistant-Office | 7 | 9 | 10 | 7 | 5 | 4 | 3.5 | 3 | 6.5 | 4 | 5 | 6 | 5 | 2 |
| Radiographer/Rad. Technic. | 9 | 8 | 7 | 8 | 9.5 | 7 | 8.5 | 8 | 12 | 8 | 11 | 7 | 11.5 | 7 |
| Other | 2 | 9 | 5 | 11 | 1.5 | 8 | 3.5 | 9 | 4 | 6 | 5 | 9 | 3 | 3.5 |

Hard of Hearing with Modifications. Selections by teachers indicated that a person who was hard of hearing could compete successfully with non-handicapped when specific program modifications are made in the area of nursing. The programs/positions for aide/orderly were ranked number one, and Licensed Practical Nurse was ranked second. Teachers further identified programs/positions for Dental Assistant and Laboratory Assistant as ranking third with the broad category of "Other" ranking fourth.

Practitioners indicated that positions/programs for Laboratory Assistant were ranked number one. Practitioners ranked the positions of Medical Records Technician second and Dental Assistant third. The fourth ranked position was aide/orderly.

Orthopedically Impaired with Modifications. Selections by teachers indicated that orthopedically impaired individuals could compete successfully in modified programs in Medical Records Technician and in the broad category of "Other". The programs/positions of aide/orderly and Laboratory Assistant were ranked next and Medical Office Assistant was ranked fifth. Teachers also identified the programs of Medical Laboratory Technician as ranking sixth.

Practitioners indicated that orthopedically impaired persons could compete in positions/programs of Medical Records Technician. Practitioners then ranked the position of Laboratory Assistant as second and Medical Laboratory Technician as third. The position of Medical Office Assistant was ranked fourth.

Other Health Impairments with Modifications. Teachers indicated that people with other health impairments could compete successfully in programs/positions in the field of nursing. Teachers ranked programs for aide/orderly as number one and Licensed Practical Nurse programs as second. They further identified programs for the Medical Office Assistant and the broad category of "Other" as ranking third. The programs/positions for Medical Records Technician ranked fourth.

Practitioners ranked programs/positions for Medical Records Technician as number one. The position for Laboratory Assistant ranked second and Medical Office Assistant ranked third. The positions/programs for Medical Laboratory Technician was ranked fourth.

Specific Learning Disability with Modifications. Teachers indicated that people with specific learning disabilities could compete with non-handicapped in programs/positions in the field of nursing. They ranked the programs for aide/orderly as number one and the programs for Licensed Practical Nurse as second. The ranking further showed that programs/positions for Dental Assistant were third and the broad category of "Other" was fourth.

Practitioners selections indicated that people with specific learning disabilities could compete successfully in programs/positions for aide/orderly. Practitioners further ranked positions for Dental Assistant as second and positions for Laboratory Assistant as third. The positions/programs for Medical Office Assistant were ranked fourth by the practitioners.

Speech Impaired with Modifications. Teachers indicated by their selections that people with speech impediments should be able to successfully compete in programs/positions in the field of nursing. Teachers ranked the aide/orderly programs as number one and Licensed Practical Nurse programs and Medical Records Technician programs second. The programs/positions for Laboratory Assistant, Medical Office Assistant, and the broad category of "Other" were ranked fourth. Teachers then ranked the programs/positions for Surgical Technician and Dental Assistant fifth.

Practitioners indicated that people with speech impediments could compete with modifications in the positions/programs for Medical Records Technician. The positions for Laboratory Assistant ranked second and Dental Assistant ranked third. The Medical Laboratory Technician positions/programs were ranked fourth.

Visually Handicapped with Modifications. Teacher selections indicated programs/positions for the aide/orderly level as the most frequently chosen area for people with visual handicaps. Programs for the Licensed Practical Nurse were ranked second and the broad category of "Other" ranked third. The programs/positions for Medical Records Technician ranked fourth.

Practitioners indicated that people with visual handicaps could compete most successfully in programs/positions for Medical Records Technician. The positions for Medical Office Assistant ranked second. Practitioners further ranked the positions for the broad category of "Other" and aide/orderly as third. The programs/positions for Dental Assistant and Laboratory Assistant were ranked fourth.

Selections by teachers seemed to indicate that all handicapped individuals could compete equally if specific modifications were made for them in programs/positions. Teachers indicated the area of nursing as having the most opportunities for handicapped individuals. They indicated the orthopedically impaired were competing successfully in programs/positions for Medical Records Technician. Again, there did not seem to be much awareness of job and program requirements, or concern for the ability and restrictions of handicapped individuals.

Practitioners showed a little more flexibility in that they indicated Laboratory Assistant for the Hearing Impaired; Medical Records Technician for the orthopedically impaired, other health impaired, speech and visually impaired. Aide/orderly programs/positions were the successfully achievable areas for people with specific learning disabilities. Lack of concern for the handicapped and lack of awareness about various health careers is very apparent in the selections of most practitioners.

Selections of the combined group, teachers and practitioners, were strongly reflective of the larger, practitioner group. Opportunities were identified as Laboratory Assistant for the hearing impaired; Medical Records Technician for the orthopedically impaired, other health impaired, and speech impaired; aide/orderly for those with specific learning disabilities, and the visually impaired. The total group seemed to relate to the handicapped a little more perceptively than the individual sections. The identification of opportunities requiring other stimuli and skills for the hearing impaired, with program/job modifications, is an

important point. In the same sense, use of Medical Record Technician positions for the speech, orthopedically impaired, and other health impaired shows that perhaps respondents were generally considering verbal communications, exertion, and mobility as problems. Identification of aide/orderly positions for the learning disabled and visually impaired may be the only area that is inconsistent with general problems of handicapped individuals. Competencies requiring exact reading or measurement are not considered in these selections. It may be here that restrictions or "dead-ending" of the handicapped becomes apparent.

The researcher assumed that as teachers and practitioners of health occupations, respondents would be able to identify problem areas that might be encountered by handicapped students and employees. Respondents were asked to rate the potential problems on a three-level scale. The "major problem" level included problems that could not be adjusted for; the "minor problem" level included problems that might be expected but could be worked with and the "no problem" level indicated that no problems were expected. Table 12 shows the items considered to be potential problems for all levels by teachers and practitioners.

Teachers ranked "finding jobs which are related to the training received" and "availability of trained support personnel" as potential problems they considered to be most major. In rank order, "necessity for assistance in transporting physically handicapped students to on-the-job training sites", "standard of performance expected from all students", and "extra time required for special instruction of handicapped students" were indicated by teachers as being slightly less major in nature than the previously identified problems.

TABLE 12

ITEMS CONSIDERED POTENTIAL PROBLEMS TO HANDICAPPED
IN HEALTH OCCUPATIONS PROGRAMS/POSITIONS
As Ranked By Teachers and Practitioners

| POTENTIAL PROBLEM ITEM | NO PROBLEM Teac | NO PROBLEM Prac | MINOR PROB. Teac | MINOR PROB. Prac | MAJOR PROB. Teac | MAJOR PROB. Prac |
|---|---|---|---|---|---|---|
| 1. Standard of performance expected from all students/employees. | | | | | 4 | 10 |
| 2. Extra time required for special instruction/needs of handicapped students/employees. | | | 6 | 1 | | |
| 3. Teachers/Supervisors & Administrators inexperienced in teaching/working with handicapped persons. | | | | | 9 | 6 |
| 5. Finding jobs which are related to the training they receive. | | | | | 1.5 | 2.5 |
| 7. Safety hazards that exist in laboratories and other work places. | | | 5 | 4 | | |
| 8. Peer attitudes toward having handicapped persons in vocational programs/ the work place. | | | 3.5 | 4 | | |
| 9. Necessity for assistance in transporting physically handicapped persons to on-the-job training/work sites. | | | | | 3 | 9 |
| 10. Vocational staff's/Supervisors, Administrators and Personnel's attitude toward working with handicapped persons. | 2 | 7.5 | 10.5 | 6.5 | | |
| 11. Physical appearance of handicapped persons. | 1 | 2 | | | | |
| 12. Personal Hygiene of handicapped persons. | 3 | 1 | | | | |
| 15. Handicapped persons' level of self-esteem and confidence. | 9.5 | 9 | | | | |
| 19. Handicapped persons' attitude toward learning. | 6 | 3 | | | | |
| 20. Availability of trained support personnel (e.g., counselors, specialists, interpreters, nurse, first aid person, etc.). | | | | | 1.5 | 2.5 |
| 23. Grading/Evaluating handicapped persons differently from other students/ employees. | 8 | 4 | | | | |
| 24. Architectural barriers. | | | | | 8 | 7 |
| 25. Community resistance to supporting programs for/employment of handicapped persons. | 6 | 5.5 | | | | |
| 28. Handicapped persons' level of personal social skills. | | | 2 | 2 | | |
| 29. Handicapped persons' knowledge of job survival skills. | | | 1 | 5 | | |

Teachers further indicated "physical appearance of handicapped students", and "peer attitudes toward having handicapped student in vocational programs" as the least major problem of all potential problems at the major problem level. The "handicapped student's knowledge of job survival skills" and the "handicapped student's level of personal social skills" received top ranking by teachers at the minor problem level. The no problem level was topped by the "physical appearance of handicapped students" followed by the "vocational staff's attitude toward working with handicapped students" and the "personal hygiene of handicapped students".

Practitioner respondents ranked "lack of prevocational skills necessary for entry success in many health fields" as the leading problem at the major problem level. "Finding job related to the training received" and "availability of trained support personnel" also received high rankings as major problems. "Physical appearance of handicapped employees", "level of personal social skills", and "methods of performance evaluation for handicapped employees" were considered to be lesser problems at the major problem level. "Extra time required for special needs of handicapped employees" was the most frequently indicated potential problem at the minor problem level. "Handicapped employee's level of personal social skills" and "peer attitudes toward having handicapped employees in the work place" ranked second and third respectively. "Personal hygiene of handicapped employees" was indicated as the least potential problem at the minor problem level. In the no problem category "personal hygiene of handicapped employees" and "physical appearance

of handicapped employees" were again ranked at the top of the items practitioners considered to be no problem. The item ranked least at the no problem level was "extra time required for special needs of handicapped employees".

In comparing selections of teachers and practitioners for potential problems, several items were identified for classification as problems. Teachers and practitioners agreed on 19 items for classification; six as major problems, six as minor problems, and seven as no problems expected. Although the items were not ranked exactly the same by teachers and practitioners, all items were in the first ten selections by each group.

The general consensus of both groups' selections emphasized the existence of problems related to finances, attitudes, placement, safety, and time. The areas identified by both groups as major problems included items relevant to the financial support necessary in terms of experienced personnel, transportation, and architectural and/or equipment modifications. Attitudes of personnel and peers and safety factors were classified in the minor problem category meaning, therefore, that adjustments could be made to overcome these problems. Generally speaking, areas identified in this study as problems are the same areas considered by most as reasons for not teaching or employing the handicapped. They are the same arguments that have been used for decades as the "excuse". Final analysis of the survey responses revealed a "closed" attitude toward the handicapped by both teachers and practitioners.

## CHAPTER IV

## CONCLUSIONS AND RECOMMENDATIONS

This section will discuss the conclusions and recommendations of the research staff based on the analysis of data in the project "Assessment of Occupational Opportunities Available to Handicapped in Health Occupations Education". Each survey question will be stated and the conclusion in relation to that question will follow with the recommendations for further action.

QUESTION:

Which Health Occupations programs/positions are currently being offered to handicapped persons in your school/area?

CONCLUSION:

Opportunities available to the handicapped were selected and ranked by teachers and practitioners of health occupations. The selections or rankings were based on the programs and positions presently accepting handicapped persons, whether through mainstreaming or other methods. There seemed to be a lack of awareness of opportunities beyond the specific school or place of employment. It was assumed that if a program is offered, or a position is available, the handicapped are accepted. This assumption may be true for the very slight or mildly handicapped only.

RECOMMENDATION:

A strong inservice program needs to be developed and implemented to help health occupations personnel, teachers and practitioners, become aware of the needs, strengths and potential of handicapped persons. This program needs to address the various degrees and types of handicaps and the potential of each for occupational preparation, as well as the many opportunities and careers within the health field.

QUESTION:

Which Health Occupations programs/positions are most frequently selected and applied for by handicapped persons?

CONCLUSION:

The teachers and practitioners felt that handicapped persons most frequently applied for programs and positions in the general field of nursing. These selections may have been based on the concept that health occupations means nursing, physicians, and dentists. In addition, programs related to the nursing field are the most frequently offered programs at many schools. School counselors also assign students to nursing programs because they are not aware of the many other programs included in health occupations.

RECOMMENDATION:

Health occupations teachers and practitioners need to become involved in planning the Individual Education Program (IEP) for handicapped persons in order to help in determining the type of occupational preparation desired by, and appropriate for, the handicapped person as well as being aware of the programs that are available. This should help school counselors become aware of opportunities in health occupations other than nursing.

QUESTION:

Which Health Occupations programs/positions are handicapped persons admitted to/hired to fill most frequently?

CONCLUSION:

Teachers and practitioners felt handicapped persons were most frequently admitted to programs and hired for positions in the nursing area. This selection was based on the concept that nursing is the area most frequently accepting handicapped persons through mainstreaming. The selections indicated programs available in the school and not programs specifically modified for handicapped persons. The nursing area is the most frequently offered school program. In addition, counselors do not have knowledge of other health occupations specialities and assign students to existing programs.

RECOMMENDATION:

A program needs to be developed and implemented which will help teachers and practitioners of health occupations become

more aware of health specialties other than their own. A program of this type would enable health personnel and school counselors to be more effective in meeting needs of handicapped persons in health occupations education.

QUESTION:

Which Health Occupations programs/positions are successfully completed/filled by handicapped persons?

CONCLUSION:

Teachers and practitioners felt that handicapped persons were successfully completing programs and filling positions in the area of nursing. Again, this selection is based on the programs and positions offered in an area and not on the degree of severity of handicap. The nursing area may be the only opportunity available in some situations. The health occupations areas in which public or patient contact could be controlled and responsibility could be limited were selected for successful completion by the handicapped person. In general, this question emphasizes the lack of awareness by teachers and practitioners about health occupations education, as well as the lack of understanding about the ability and potential of handicapped persons.

RECOMMENDATION:

A program needs to be developed and implemented that would help teachers and practitioners become more aware and more understanding of handicapped persons. There should be a method of identifying the abilities and potential of the handicapped as well as emphasizing restrictions and limitations. The IEP is not comprehensive enough for this unless all teachers or personnel have been involved.

QUESTION:

In which Health Occupations programs/positions can individuals with the following handicaps be expected to equally compete with nonhandicapped person without program/position modifications?

CONCLUSION:

It would appear that teachers and practitioners did not consider the specific handicapping description when selecting areas for equal competition in an unmodified situation. The general consensus seemed to be that if the handicaps had been corrected or were of minimal severity,

the individual would not need program modifications and could be mainstreamed with nonhandicapped people. Many of the selections, by teachers and practitioners, demonstrated a lack of awareness, concern, and understanding in relation to handicapping conditions and requirements of other health occupations. The general attitude displayed by respondents seemed to be one of unconcern and of professional protection.

RECOMMENDATION:

A very definite effort should be expended to develop a program to assist in the changing of attitudes of health personnel regarding the handicapped. The overall acceptance of handicapped persons in health occupations will be based on the willingness of health occupations teachers and practicioners to look at abilities and strengths of handicapped persons and not look only at restrictions, limitations and the need for care and assistance.

QUESTION:

In which Health Occupations programs/positions can individuals with the following handicaps be expected to equally compete with nonhandicapped individuals if program/job modifications are made?

CONCLUSION:

In selecting the areas for equal competition with program modifications, the teachers and practitioners showed only a slight consideration for handicap types but no awareness or knowledge of the difficulties encountered or job requirements. Most selections were made on the basis of ease in modifying equipment and not on modifications in methods or other requirements. When it appeared that modifications in methods of teaching and instructional materials were needed, the low-level or "dead-end" areas and occupations were selected.

RECOMMENDATION:

Further study and investigation is needed to identify the many modifications in equipment, curriculum, teaching methods, and instructional materials necessary for preparing handicapped persons to function in occupations within the health field. This would help the handicapped person in determining their own health career. It would also demonstrate to health personnel the ability and potential for success of handicapped persons within the health field.

PART III QUESTION:

Rate each of the items as problems that might be encountered by handicapped people.

CONCLUSION:

In identifying the problem areas related to handicapped persons in health occupations education, teachers and practitioners selected similar topic areas. The areas identified items relating to financial support, experience of personnel with handicapped persons, transportation, architectural and equipment modifications as major problems. These areas are the same areas most frequently used as reasons for not teaching handicapped persons in vocational education and or health occupations education. These reasons are the "excuses" used for years by most people in relation to the limitations of handicapped within any situation or for the 'dead-ending" of handicapped within an occupational area.

RECOMMENDATION:

The attitudes of health personnel need to be altered in order for programs in health occupations to be effective for handicapped persons. The basic method for changing attitudes is to involve people in the situation. Through the implementation of previously suggested recommendations for health personnel, education of handicapped, involvement in I.E.P. planning and other factors related to education, attitudes should be effected.

## SUMMARY

This project was to identify opportunities available to handicapped persons in Health Occupations Education and list or catalog those opportunities with the necessary modifications for programs. The project was restricted in what it was able to accomplish for several reasons. The necessity for extensive modifications in many of the health areas for several of the handicap types restricted the completion of the catalog. Other limitations were related to definition of the population and the lack of available questionnaires. The greatest limitation seemed to be the lack of interest on the part of the respondents.

The data was collected and analyzed by the project staff and a general conclusion was reached. The number of handicapped persons working in health occupations and the number of opportunities available to them is so extremely low because health personnel do not seem to be concerned or interested in helping or working with handicapped persons. The general analysis revealed a "Closed Attitude" about the ability, potential and future of handicapped persons in Health Occupations Education.

The project staff recommends a strong program in education to help change the attitudes of health personnel. It is only through awareness, concern and understanding that attitudes can be changed.

## REFERENCES


Alperin, Melvin and Alperin, Stanley. 120 Careers in the Health Care Field. Ballinger Publishing Company, Cambridge, Mass.

Bayne, Turner and Jackson. An Assessment of Vocational Education Needs of Disadvantaged and Handicapped In Kentucky: Final Report. Bureau of Vocational Education, Kentucky Department of Education, 1977.

Conaway, Charlotte A. "Vocational Education Serves the Handicapped." VocEd. April, 1981, pp. 22-25.

Franken, Marion E. Identifying Handicapped Students and Their Vocational Needs for 1977-1982. University of Wisconsin-Madison: Wisconsin Vocational Studies Center. 1977.

Meers, Steckelberg, Vasa and Watkins. "The Handicapped: Learning, Earning, Contributing". National Training Project for the Development and Implementation of Vcoational Teacher Education Programs for Working with the Handicapped. University of Nebraska-Lincoln. 1978.

New Jersey Occupational Resource Centers. Helping Educationally Disadvantaged Students Through Vocational Education. Trenton, N.Y.: Division of Vocational Education, New Jersey State Department of Education.

O'Brian, Thomas. "Vocational Training and Placement of Handicapped Students". Industrial Education. March, 1980. April, 1981, p. 21.

Parker, Barbara and Buchkoski, David. Program for Deaf Students: Vocational Exploration Curriculum. St. Paul, Minnesota: St. Paul Technical Vocational Institute. 1978.

Phillips, Ione, Editorial. "Least Restrictive Environment". VocEd. April, 1981, p. 21.

Simmers, Louise M. Diversified Health Occupations: Competency Based Curriculum. Louise M. Simmers, Mansfield, Ohio: 1980.

U. S. Dept. HEW. RESURGE '79. Office of Education, Bureau of Occupational and Adult Education. September, 1979.

Uthe, Elaine F. Occupational Opportunities for the Physically Handicapped: Final Report. Bureau of Vocational Education, Kentucky Department of Education, 1980.

Vocational Education for Special Needs. SERVE District #916, White Bear Lake, Minnesota.

Appendix A

WESTERN KENTUCKY UNIVERSITY

BOWLING GREEN, KENTUCKY 42101

Center for Career and
Vocational Teacher Education

December 5, 1980

Dear Health Occupations Instructor:

The Center for Career and Vocational Teacher Education at Western Kentucky University, in response to a request from the Kentucky Bureau of Vocational Education, has applied for and received a research grant to assess the occupational opportunities for handicapped persons in Health Occupations.

Because of your involvement in vocational education and your status as a health occupations professional actively involved in teaching and placement, we are asking that you participate in this survey. The survey is concerned with identifying opportunities available to the handicapped in health occupations. We recognize your concern for the future of vocational education, including training and possible employment of the handicapped. We therefore hope you will perceive completing this questionnaire as an opportunity for enhancing the quality and expanding the boundaries of vocational education in coming years. Your responses need only apply to your professional area; however, if you are knowledgeable of other areas listed, feel free to respond to those also.

The information secured through your effort will be used to: (1) identify opportunities available to the handicapped; (2) aid instructors in modifying programs to accommodate handicapped students; and (3) assist the handicapped in selecting programs in which they can equally compete with the nonhandicapped. All information received from individual questionnaires will be compiled and reported collectively by health occupation and academic preparation level. You and your responses will remain anonymous.

Reading and completing the questionnaire should take no more than 30 minutes. Return to us only the questionnaire; the booklet of definitions is yours to keep. A postage prepaid envelope is enclosed for return mailing convenience.

Please accept the attached gift as a small token of our appreciation for the time and effort you spend in filling out the questionnaire. If you have questions or would like additional information about the survey, you may call us at (502) 745-3441.

Thank you in advance for being a participant.

Sincerely,

Norma Jean Schira

Norma J. Schira, Ed.D.
Project Director

Sharon Y. Burton
Research Assistant

bb

WESTERN KENTUCKY UNIVERSITY
BOWLING GREEN, KENTUCKY 42101

Center for Career and
Vocational Teacher Education

December 5, 1980

Dear Professional:

The Center for Career and Vocational Teacher Education at Western Kentucky University, in response to a request from the Kentucky Bureau of Vocational Education, has applied for and received a research grant to assess the occupational opportunities for handicapped persons in Health Occupations.

Because of your involvement in the medical field and your status as a health occupations professional dedicated to providing services which promote good health, we are asking that you participate in this survey. The survey is concerned with identifying opportunities available to the handicapped in health occupations. We recognize your concern for the future of health occupations education, including training and possible employment of the handicapped. We therefore hope you will perceive completing this questionnaire as an opportunity for enhancing the quality and expanding the boundaries of health occupations education in coming years. Your responses need only apply to your professional area; however, if you are knowledgeable of other areas listed, feel free to respond to those also.

The information secured through your effort will be used to: (1) identify opportunities available to the handicapped; (2) aid instructors in modifying programs to accommodate handicapped students; and (3) assist the handicapped in selecting programs in which they can equally compete with the nonhandicapped. All information received from individual questionnaires will be compiled and reported collectively by health occupation and academic preparation level. You and your responses will remain anonymous.

Reading and completing the questionnaire should take no more than 30 minutes. Return to us only the questionnaire; the booklet of definitions is yours to keep. A postage prepaid envelope is enclosed for return mailing convenience.

Please accept the attached gift as a small token of our appreciation for the time and effort you spend in filling out the questionnaire. If you have questions or would like additional information about the survey, you may call us at (502) 745-3441.

Thank you in advance for being a participant.

Sincerely,

Norma Jean Schira

Norma J. Schira, Ed.D.
Project Director

Sharon Y. Burton

Sharon Y. Burton
Research Assistant

bb

WESTERN KENTUCKY UNIVERSITY

BOWLING GREEN, KENTUCKY 42101

Center for Career and
Vocational Teacher Education

Your status as a health occupations professional, dedicated to providing and promoting quality health care, emphasizes the importance of your input in determining the future of health occupations education.

It is extremely important that decisions about health occupations education have the support of professionals in each specialty area. Because of your expertise you have been selected to represent your health occupations specialty in a survey conducted by the Center for Career and Vocational Teacher Education at Western Kentucky University. The survey will identify opportunities available to handicapped persons in the health field and assist in selecting programs in which the handicapped individual can compete.

Your involvement in total health care and service makes your input imperative. Your participation will influence decisions effecting the quality and expansion of health occupations education programs in coming years.

Reading and completing the questionnaire should take no more than 30 minutes. Don't let tomorrow's decisions be made without you; please complete the questionnaire today. A postage prepaid envelope is enclosed for return mailing convenience.

If you have questions or would like additional information about the survey, you may call us at (502) 745-3441.

Thank you in advance for giving this request your prompt attention.

Sincerely,

Norma Jean Schira

Norma J. Schira, Ed.D.
Project Director

Sharon Y. Burton

Sharon Y. Burton
Research Assistant

bb

## SURVEY OF OCCUPATIONAL OPPORTUNITIES IN HEALTH OCCUPATIONS FOR HANDICAPPED

The Center for Career and Vocational Teacher Education at Western Kentucky University is conducting a survey to assess and identify the occupational opportunities available to the handicapped in health occupations. The data obtained from this survey will be used to: (1) identify opportunities available to the handicapped; (2) aid instructors in modifying programs to accommodate handicapped students; and (3) assist the handicapped in selecting programs in which they can equally compete with the nonhandicapped.

Although the definition of handicapped includes many classifications of handicapping conditions, for the purpose of this survey your response to the items contained in the questionnaire should take into account only the handicapping conditions that are defined below. In keeping with the legal definition of "handicapped", the following definitions are from the Federal Register, (P. L. 94-482).

### HANDICAPPED DEFINITIONS

**Handicapped** means a person who is mentally retarded; hard of hearing; deaf; speech impaired; visually handicapped; seriously emotionally disturbed; orthopedically impaired; or other health impaired person, or persons with specific learning disabilities; and who by reason of the above:

- -requires special education and related services, and
- -cannot succeed in the regular vocational education program without special educational assistance; or
- -requires a modified vocational education program.

**Deaf** means a hearing impairment which is so severe that the individual is impaired in processing linguistic information through hearing, with or without amplification, which adversely affects educational performance.

HANDICAPPED DEFINITIONS (Cont')

| | |
|---|---|
| Hard of Hearing | means a hearing impairment, whether permanent or fluctuating, which adversely affects an individual's educational performance but which is not included under the definition of "deaf". |
| Orthopedically Impaired | means a severe orthopedic impairment which adversely affects an individual's educational performance. The term includes impairments caused by congenital anomaly (e. g., clubfoot, absence of some member, etc.) impairments caused by disease (e. g., poliomyelitis, bone tuberculosis, etc.) and impairments from other causes (e. g., cerebral palsy, amputations, and fractures or burns which cause contractures). |
| Other Health Impaired | means limited strength, vitality or alertness, due to chronic or acute health problems such as a heart condition, tuberculosis, rheumatic fever, nephritis, asthma, sickle cell anemia, hemophilia, epilepsy, lead poisoning, leukemia, or diabetes, which adversely affects an individual's educational performance. |
| Specific Learning Disability | means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain disfunction, dyslexia, and developmental aphasia. The term does not include individuals who have learning problems which are primarily the result of visual, hearing, or motor handicaps, of mental retardation, of emotional disturbance or of environmental, cultural, or economic disadvantage. |
| Speech Impaired | means a communication disorder, such as stuttering, impaired articulation, a language impairment, or a voice impairment, which adversely affects an individual's educational performance. |
| Visually Handicapped | means a visual impairment which, even with correction, adversely affects an individual's educational performance. The term includes both partially seeing and blind individuals. |

The following health occupation definitions are included in the Glossary of Allied Health Occupational Titles, a resource by the American Society of Allied Health Professions; and the Occupational Outlook Handbook, a resource by the U. S. Department of Labor - Bureau of Labor Statistics.

## HEALTH OCCUPATIONS DEFINITIONS

| | |
|---|---|
| NURSING | assisting the physician in bedside patient care, and providing specialty services as required by institutional and community needs. |
| Licensed Practical Nurse (L.P.N.): | provides nursing care requiring technical knowledge but not the professional training of a registered nurse. Duties include providing much of the bedside care needed by patients, such as taking and recording temperatures and blood pressures, changing dressings, administering certain prescribed medicines, and bathing bed patients and helping them with personal hygiene. |
| Aide/Orderly: | provides a variety of duties; most require relatively little specialized training but contribute to the comfort and care of patients. The range of duties performed includes making beds, delivering messages, counting linens, and escorting patients to other departments in the hospital. May also include, where hospital policy permits, the taking of vital signs, and in the case of orderlies, includes performing heavier work in the nursing unit and maintaining equipment and may include setting up of traction and performing male catheterization. |
| DENTAL | variety of services rendered to the dentist including general office work, laboratory work, and assisting the dentist at the chairside. |
| Dental Hygienist (R.D.H.): | professional oral health clinician and educator who helps public develop and maintain optimum oral health. Performs preventive, restorative, and therapeutic services under the supervision of a dentist. |
| Dental Assistant (C.D.A.): | assists dentist at the chairside in dental operations, performs reception and clerical functions, and carries out dental radiography and selected dental laboratory work. |

HEALTH OCCUPATIONS DEFINITIONS (Cont')

| | |
|---|---|
| CLINICAL LABORATORY | a clinical laboratory setting of collecting, mounting, processing, classifying, and analyzing laboratory specimens. |
| Medical Laboratory Technician (M.L.T.): | works under the supervision of a medical technologist, pathologist, or physician, in performing routine or specialized bacteriological, biological, and chemical tests, requiring limited independent judgement or correlation competency, to provide data for use in the diagnosis and evaluation of effective treatment of disease. |
| Laboratory Assistant (C.L.A.): | works under the direct supervision of a medical technologist, pathologist, physician, or qualified scientist, in performing routine laboratory procedures requiring basic technical skills and minimal independent judgement, in chemistry, hematology, and microbiology. |
| RESPIRATORY | under medical direction, treatment, management, control, and performance of diagnostic evaluations in the care of patients with deficiencies and abnormalities in the cardio-pulmonary system. |
| Respiratory Therapist (A.R.R.T.): | administers respiratory care under the direction of a physician, evaluating the patients progress, and making recommendations for respiratory therapy. Proficiencies include ventilatory therapy, cardiorespiratory rehabilitation, microenvironmental control, and diagnostic testing of the respiratory system. (Inhalation Therapist). |
| Inhalation Technician (C.I.T.): | routinely treats patients requiring noncritical respiratory care, and recognizes and responds to a limited number of specified patient respiratory emergencies under supervision. |
| OPERATING ROOM | assistance to the surgeon in the operating room and provision of specialty services as required by institutional needs. |
| Surgical Technician (C.S.T.): | works as general technical assistant on the surgical team by arranging supplies and instruments in the operating room, maintaining antiseptic conditions, preparing patients for surgery and assisting the surgeon during the operation. (Formerly operating room technician). |

## HEALTH OCCUPATIONS DEFINITIONS (Cont')

| | |
|---|---|
| MEDICAL RECORDS | planning, organization and management of patient information systems and statistical reports for medical and administrative staff use and health care research. |
| Medical Record Technician (A.M.R.T.): | serves as the skilled assistant to the medical record administrator, carrying out the technical work of coding, analyzing, and preserving patient's medical records and compiling reports, disease indices, and statistics in health care facilities. |
| MEDICAL/DENTAL OFFICE | work in various support capacities to assist in the management and operation of clinical offices and health facilities. |
| Medical Assistant (Office) (C.M.A.): | assumes support functions in a physician's office, including routine administrative, clerical and record keeping procedures. Assists the physician in medical examinations and treatments, and cares for medical equipment and supplies. |
| RADIOLOGY | use of ionizing radiation for diagnostic, therapeutic, and research purposes. |
| Radiologic Technician/ Radiographer (A.R.R.T.): | maintains and safely uses equipment and supplies necessary to demonstrate portions of the human body on X-ray film or fluroscopic screen for diagnostic purposes. May supervise and/or teach radiologic personnel. (Radiologic technologist). |



The cost of printing this publication by Western Kentucky University was paid from state funds KRS 57.375.

Survey Form #_____ SURVEY OF OCCUPATIONAL OPPORTUNITIES IN

HEALTH OCCUPATIONS FOR HANDICAPPED

PART: I

Instructions: Please provide the following information about yourself by circling the number in front of the appropriate response.

1.) Vocational area of primary responsibility:

(1) Nursing
(2) Dental
(3) Medical Laboratory
(4) Respiratory
(5) Surgical Technician
(6) Medical Records
(7) Medical Assistant
(8) Radiology
(9) Other

2.) Position:

(1) Teacher
(2) Program Coordinator
(3) Administrator
(4) Practitioner
(5) Other

3.) Educational preparation in health field:

(1) Vocational Certification
(2) Associate Degree
(3) Bachelor's Degree
(4) Master's Degree or above
(5) Other

4.) Years of experience (practice and/or teaching) in vocational area:

(1) 1 - 5
(2) 6 - 10
(3) 11 - 15
(4) 16 or more

5.) Experience working with or teaching the handicapped:

(1) none (no experience)
(2) some (have occasionally worked with or taught handicapped individuals)
(3) considerable (have worked with or taught handicapped individuals on many occasions)

6.) Sex:

(1) Male
(2) Female

THINK*** BEFORE YOU RESPOND.

Survey Form #_____

SURVEY OF OCCUPATIONAL OPPORTUNITIES

IN HEALTH OCCUPATIONS FOR HANDICAPPED

PART: II

Instructions: Indicate your response to the following questions by placing a check in the box provided.

| | NURSING | | DENTAL | | MEDICAL LAB | | RESPIRATORY | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Licensed Practical Nurse | Aide/Orderly | Dental Hygienist | Dental Assistant | Medical Laboratory Technician | Laboratory Assistant | Respiratory Therapist | Inhalation Technician | Surgical Technician | Medical Record Technician | Medical Assistant (Office) | Radiographer/Radiologic Technician | Other |
| (1) Which Health Occupation program(s) is/are currently being offered to handicapped students in your school? | | | | | | | | | | | | | |
| (2) Which Health Occupation program(s) is/are most frequently selected and applied for by handicapped students? | | | | | | | | | | | | | |
| (3) Which Health Occupation program(s) is/are handicapped students admitted to most frequently? | | | | | | | | | | | | | |
| (4) Which Health Occupation program(s) is/are successfully completed by handicapped students? ("Successfully completed" determined by acquisition of marketable knowledge and skills and/or gainful employment). | | | | | | | | | | | | | |

| | NURSING | | DENTAL | | MEDICAL LAB | | RESPIRATORY | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Licensed Practical Nurse | Aide/Orderly | Dental Hygienist | Dental Assistant | Medical Laboratory Technician | Laboratory Assistant | Respiratory Therapist | Inhalation Technician | Surgical Technician | Medical Record Technician | Medical Assistant (Office) | Radiographer/Radiologic Technician | Other |
| (5) In which Health Occupation program(s) can individuals with the following handicaps be expected to equally compete with nonhandicapped people without program modifications? | | | | | | | | | | | | | |
| 1. deaf | | | | | | | | | | | | | |
| 2. hard of hearing | | | | | | | | | | | | | |
| 3. orthopedically impaired | | | | | | | | | | | | | |
| 4. other health impaired | | | | | | | | | | | | | |
| 5. specific learning disability | | | | | | | | | | | | | |
| 6. speech impaired | | | | | | | | | | | | | |
| 7. visually handicapped | | | | | | | | | | | | | |
| (6) In which Health Occupation program(s) can individuals with the following handicaps be expected to equally compete with nonhandicapped individuals if program modifications are made? (Potential modifications, adjustments, and/or adaptations are listed). | | | | | | | | | | | | | |
| 1. deaf (special hearing devices; use of an interpreter; more illustrations and written materials; use of non-auditory cues by instructor, such as hand gestures and facial expressions). | | | | | | | | | | | | | |

| | NURSING | | DENTAL | | MEDICAL LAB | | RESPIRATORY | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Licensed Practical Nurse | Aide/Orderly | Dental Hygienist | Dental Assistant | Medical Laboratory Technician | Laboratory Assistant | Respiratory Therapist | Inhalation Technician | Surgical Technician | Medical Record Technician | Medical Assistant (Office) | Radiographer/Radiologic Technician | Other |
| 2. <u>hard of hearing</u><br><br>(seat in front of room; louder presentation by instructor; more illustrations and written materials; special hearing devices; use of an interpreter; use of non-auditory cues by instructor, such as hand gestures and facial expressions; extraneous background noises controlled or diminished; more careful articulation by instructor). | | | | | | | | | | | | | |
| 3. <u>orthopedically impaired</u><br><br>(special elevator service; early class dismissal; student helper/paid attendant; ramps; modified work stations; hand rails; motorized wheel chairs; modification of equipment; close safety supervision). | | | | | | | | | | | | | |
| 4. <u>other health impaired</u><br><br>(provision for special medication, diet, and/or health care; allowance for illness related absenteeism; modified task requirements based on physical strength, stamina, intellectual, social and motivational levels; modified work stations to compensate for lack of mobility, etc.). | | | | | | | | | | | | | |

| | NURSING | | DENTAL | | MEDICAL LAB | | RESPIRATORY | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Licensed Practical Nurse | Aide/Orderly | Dental Hygienist | Dental Assistant | Medical Laboratory Technician | Laboratory Assistant | Respiratory Therapist | Inhalation Technician | Surgical Technician | Medical Record Technician | Medical Assistant (Office) | Radiographer/Radiologic Technician | Other |
| 5. specific learning disability<br>(teach to student's cognitive strengths; break down reading and other tasks into smaller units which may be more readily mastered; provide tape recordings, tutors and other aids to students with reading problems; give oral exams to students who have problems writing). | | | | | | | | | | | | | |
| 6. speech impaired<br>(speech therapy; sign language; interpreter; written examinations; look at the student when the student is talking; ensure a climate of acceptance without ridicule; encourage speech; development and use of nonverbal communication). | | | | | | | | | | | | | |
| 7. visually handicapped<br>(adequate lighting; corrective lenses; readers; guides; oral instruction; talking books; braille; large-type typewriter; heavy dark pencil; special seating; special orientation to building and classes; appropriate safeguards on machines; control glare and shadows; use of concrete terms). | | | | | | | | | | | | | |

Survey Form #_____

SURVEY OF OCCUPATIONAL OPPORTUNITIES IN

HEALTH OCCUPATIONS FOR HANDICAPPED

PART: III

Instructions: Rate each of the following items as problems that might be encountered by handicapped students. Indicate your response by circling the appropriate number under the Level of Problem column. Please use the following scale:

Rating Scale

1 = Not a problem (no problems expected)

2 = Minor problem (problems expected but can work with them)

3 = Major problem (problems cannot be adjusted for)

| | POTENTIAL PROBLEM | LEVEL OF PROBLEM | | |
|---|---|---|---|---|
| | | None | Minor | Major |
| 1. | Standard of performance expected from all students. | 1 | 2 | 3 |
| 2. | Extra time required for special instruction of handicapped students. | 1 | 2 | 3 |
| 3. | Teacher inexperienced in teaching handicapped students. | 1 | 2 | 3 |
| 4. | Reading level of most handicapped students. | 1 | 2 | 3 |
| 5. | Finding jobs which are related to the training they receive. | 1 | 2 | 3 |
| 6. | Lack of prevocational skills necessary for entry success in vocational programs. | 1 | 2 | 3 |
| 7. | Safety hazards that exist in laboratories and other work places. | 1 | 2 | 3 |
| 8. | Peer attitudes toward having handicapped students in vocational programs. | 1 | 2 | 3 |
| 9. | Necessity for assistance in transporting physically handicapped students to on-the-job training sites. | 1 | 2 | 3 |
| 10. | Vocational staff's attitude toward working with handicapped students. | 1 | 2 | 3 |
| 11. | Physical appearance of handicapped students. | 1 | 2 | 3 |
| 12. | Personal hygiene of handicapped students. | 1 | 2 | 3 |

The cost of printing this publication by Western Kentucky University was paid from state funds KRS 57.375

| | POTENTIAL PROBLEM | LEVEL OF PROBLEM None | Minor | Major |
|---|---|---|---|---|
| 13. | Stamina needed to complete the length of vocational training programs. | 1 | 2 | 3 |
| 14. | Entrance requirements for vocational programs being too strict for handicapped individuals. | 1 | 2 | 3 |
| 15. | Handicapped student's level of self-esteem and confidence. | 1 | 2 | 3 |
| 16. | Handicapped student's ability to follow oral instructions. | 1 | 2 | 3 |
| 17. | Handicapped student's ability to communicate in written form. | 1 | 2 | 3 |
| 18. | Handicapped student's level of verbal skills. | 1 | 2 | 3 |
| 19. | Handicapped student's attitude toward learning. | 1 | 2 | 3 |
| 20. | Availability of trained support personnel (e.g., vocational counselors, speech and hearing specialists, etc.) | 1 | 2 | 3 |
| 21. | Parents reluctance to accept program placement recommendations deemed appropriate by vocational education staff. | 1 | 2 | 3 |
| 22. | Methods of evaluating handicapped student's performance. | 1 | 2 | 3 |
| 23. | Grading handicapped students differently from other students. | 1 | 2 | 3 |
| 24. | Architectural barriers. | 1 | 2 | 3 |
| 25. | Handicapped student's level of understanding of job vocabulary. | 1 | 2 | 3 |
| 26. | Community resistance to supporting programs for handicapped persons. | 1 | 2 | 3 |
| 27. | Preparing employers to accept handicapped persons as employees. | 1 | 2 | 3 |
| 28. | Handicapped student's level of personal social skills. | 1 | 2 | 3 |
| 29. | Handicapped student's knowledge of job survival skills. | 1 | 2 | 3 |
| 30. | Handicapped student's level of math and computation skills. | 1 | 2 | 3 |

THANK YOU FOR PARTICIPATING!

Survey Form #_____ SURVEY OF OCCUPATIONAL OPPORTUNITIES IN

001725 HEALTH OCCUPATIONS FOR HANDICAPPED

PART: I

Instructions: Please provide the following information about yourself by circling the number in front of the appropriate response.

1.) Vocational area of primary responsibility:

(1) Nursing
(2) Dental
(3) Medical Laboratory
(4) Respiratory
(5) Surgical Technician
(6) Medical Records
(7) Medical Assistant
(8) Radiology
(9) Other

2.) Position:

(1) Teacher
(2) Program Coordinator
(3) Administrator
(4) Practitioner
(5) Other

3.) Educational preparation in health field:

(1) Vocational Certification
(2) Associate Degree
(3) Bachelor's Degree
(4) Master's Degree or above
(5) Other

4.) Years of experience (practice and/or teaching) in vocational area:

(1) 1 - 5
(2) 6 - 10
(3) 11 - 15
(4) 16 or more

5.) Experience working with or teaching the handicapped:

(1) none (no experience)
(2) some (have occasionally worked with or taught handicapped individuals)
(3) considerable (have worked with or taught handicapped individuals on many occasions)

6.) Sex:

(1) Male
(2) Female

THINK*** BEFORE YOU RESPOND.

Survey Form #_____

SURVEY OF OCCUPATIONAL OPPORTUNITIES IN HEALTH OCCUPATIONS FOR HANDICAPPED

PART: II

Instructions: Indicate your response to the following questions by placing a check in the box provided.

| | NURSING | | DENTAL | | MEDICAL LAB | | RESPIRATORY | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Licensed Practical Nurse | Aide/Orderly | Dental Hygienist | Dental Assistant | Medical Laboratory Technician | Laboratory Assistant | Respiratory Therapist | Inhalation Technician | Surgical Technician | Medical Record Technician | Medical Assistant (Office) | Radiographer/Radiologic Technician | Other |
| (1) Which Health Occupation position(s) is/are currently being occupied by handicapped individuals in your facility or community? | | | | | | | | | | | | | |
| (2) Which Health Occupation position(s) is/are most frequently applied for by handicapped individuals? | | | | | | | | | | | | | |
| (3) Which Health Occupation position(s) is/are handicapped individuals most frequently hired to fill? | | | | | | | | | | | | | |
| (4) Which Health Occupation position(s) is/are successfully occupied by handicapped individuals? ("Successfully occupied" determined by the fulfillment of all job requirements at an acceptable proficiency level). | | | | | | | | | | | | | |

| | NURSING | | DENTAL | | MEDICAL LAB | | RESPIRATORY | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Licensed Practical Nurse | Aide/Orderly | Dental Hygienist | Dental Assistant | Medical Laboratory Technician | Laboratory Assistant | Respiratory Therapist | Inhalation Technician | Surgical Technician | Medical Record Technician | Medical Assistant (Office) | Radiographer/Radiologic Technician | Other |
| (5) In which Health Occupation position(s) can individuals with the following handicaps be expected to equally compete with nonhandicapped people without job modifications? | | | | | | | | | | | | | |
| 1. deaf | | | | | | | | | | | | | |
| 2. hard of hearing | | | | | | | | | | | | | |
| 3. orthopedically impaired | | | | | | | | | | | | | |
| 4. other health impaired | | | | | | | | | | | | | |
| 5. specific learning disability | | | | | | | | | | | | | |
| 6. speech impaired | | | | | | | | | | | | | |
| 7. visually handicapped | | | | | | | | | | | | | |
| (6) In which Health Occupation position(s) can individuals with the following handicaps be expected to equally compete with nonhandicapped individuals if job modifications are made? (Potential modifications, adjustments, and/or adaptations are listed). | | | | | | | | | | | | | |
| 1. <u>deaf</u> (special hearing devices; use of an interpreter; written materials and instructions; use of non-auditory cues by other personnel, such as hand gestures and facial expressions). | | | | | | | | | | | | | |

| | NURSING | | DENTAL | | MEDICAL LAB | | RESPIRATORY | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Licensed Practical Nurse | Aide/Orderly | Dental Hygienist | Dental Assistant | Medical Laboratory Technician | Laboratory Assistant | Respiratory Therapist | Inhalation Technician | Surgical Technician | Medical Record Technician | Medical Assistant (Office) | Radiographer/Radiologic Technician | Other |
| 2. hard of hearing<br>(written materials and instructions; special hearing devices; use of an interpreter; use of non-auditory cues by other personnel, such as hand gestures and facial expressions; extraneous background noises controlled or diminished; more careful articulation by other personnel). | | | | | | | | | | | | | |
| 3. orthopedically impaired<br>(elevator service; ramps; modified work stations; hand rails; motorized wheel chairs; modification of equipment; close safety supervision). | | | | | | | | | | | | | |
| 4. other health impaired<br>(provision for special medication, treatment and/or health care; modified task requirements based on physical strength, stamina, intellectual, social, and motivational levels; modified work stations to compensate for lack of mobility, etc.). | | | | | | | | | | | | | |

| | NURSING | | DENTAL | | MEDICAL LAB | | RESPIRATORY | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Licensed Practical Nurse | Aide/Orderly | Dental Hygienist | Dental Assistant | Medical Laboratory Technician | Laboratory Assistant | Respiratory Therapist | Inhalation Technician | Surgical Technician | Medical Record Technician | Medical Assistant (Office) | Radiographer/Radiologic Technician | Other | |
| 5. specific learning disability<br><br>(divide tasks into smaller units which may be more readily mastered; provide tape recordings and other aids to employees with reading problems; give oral instructions to employees who cannot read). | | | | | | | | | | | | | | |
| 6. speech impaired<br><br>(sign language; interpreter; written instructions and explanations; look at the employee when he/she is talking; ensure a climate of acceptance without ridicule; encourage speech; development and use of nonverbal communication). | | | | | | | | | | | | | | |
| 7. visually handicapped<br><br>(adequate lighting; corrective lenses; readers; guides; oral instructions; talking book; braille; large-type typewriter; heavy dark pencil; special seating; special orientation to building; appropriate safeguards on machines; control glare and shadows; use concrete terms). | | | | | | | | | | | | | | |

Survey Form #_____

SURVEY OF OCCUPATIONAL OPPORTUNITIES IN

HEALTH OCCUPATIONS FOR HANDICAPPED

PART: III

Instructions: Rate each of the following items as problems that might be encountered by handicapped people when seeking employment. Indicate your response by circling the appropriate number under the Level of Problem column. Please use the following scale:

Rating Scale

1 = Not a problem (no problems expected)

2 = Minor problem (problems expected but can work with them)

3 = Major problem (problems cannot be adjusted for)

| | POTENTIAL PROBLEM | LEVEL OF PROBLEM | | |
|---|---|---|---|---|
| | | None | Minor | Major |
| 1. | Standard of performance expected from all employees. | 1 | 2 | 3 |
| 2. | Extra time required for special needs of handicapped employees. | 1 | 2 | 3 |
| 3. | Supervisor and administrator inexperienced in working with handicapped employees. | 1 | 2 | 3 |
| 4. | Reading level of most handicapped people. | 1 | 2 | 3 |
| 5. | Finding jobs which are related to the training they receive. | 1 | 2 | 3 |
| 6. | Lack of prevocational skills necessary for entry success in many health fields. | 1 | 2 | 3 |
| 7. | Safety hazards that exist in laboratories and other work places. | 1 | 2 | 3 |
| 8. | Peer attitudes toward having handicapped employees in the work place. | 1 | 2 | 3 |
| 9. | Necessity for assistance in transporting physically handicapped employees to on-the-job sites. | 1 | 2 | 3 |
| 10. | Supervisors, administrators, and other personnel's attitude about working with handicapped employees. | 1 | 2 | 3 |
| 11. | Physical appearance of handicapped employees. | 1 | 2 | 3 |
| 12. | Personal hygiene of handicapped employees. | 1 | 2 | 3 |

| | POTENTIAL PROBLEM | LEVEL OF PROBLEM None | Minor | Major |
|---|---|---|---|---|
| 13. | Stamina needed to complete an eight hour work day, possibly requiring overtime. | 1 | 2 | 3 |
| 14. | Entrance requirements for employment being too strict for handicapped individuals. | 1 | 2 | 3 |
| 15. | Handicapped employee's level of self-esteem and confidence. | 1 | 2 | 3 |
| 16. | Handicapped employee's ability to follow oral instructions. | 1 | 2 | 3 |
| 17. | Handicapped employee's ability to communicate in written form. | 1 | 2 | 3 |
| 18. | Handicapped employee's level of verbal skills. | 1 | 2 | 3 |
| 19. | Handicapped employee's attitude toward professional growth and development. | 1 | 2 | 3 |
| 20. | Availability of trained support personnel (e.g., interpreter, nurse or other person knowledgeable of emergency first aid, etc.). | 1 | 2 | 3 |
| 21. | Family reluctance to accept job placement recommendations and task requirements deemed appropriate by the employer. | 1 | 2 | 3 |
| 22. | Methods of evaluating handicapped employee's performance. | 1 | 2 | 3 |
| 23. | Evaluating handicapped employees differently than other employees. | 1 | 2 | 3 |
| 24. | Architectual barriers. | 1 | 2 | 3 |
| 25. | Handicapped employee's level of understanding of job vocabulary. | 1 | 2 | 3 |
| 26. | Community resistance to employment of handicapped persons. | 1 | 2 | 3 |
| 27. | Preparing employers to accept handicapped persons as employees. | 1 | 2 | 3 |
| 28. | Handicapped employee's level of personal social skills. | 1 | 2 | 3 |
| 29. | Handicapped employee's knowledge of job survival skills. | 1 | 2 | 3 |
| 30. | Handicapped employee's level of math and computation skills. | 1 | 2 | 3 |

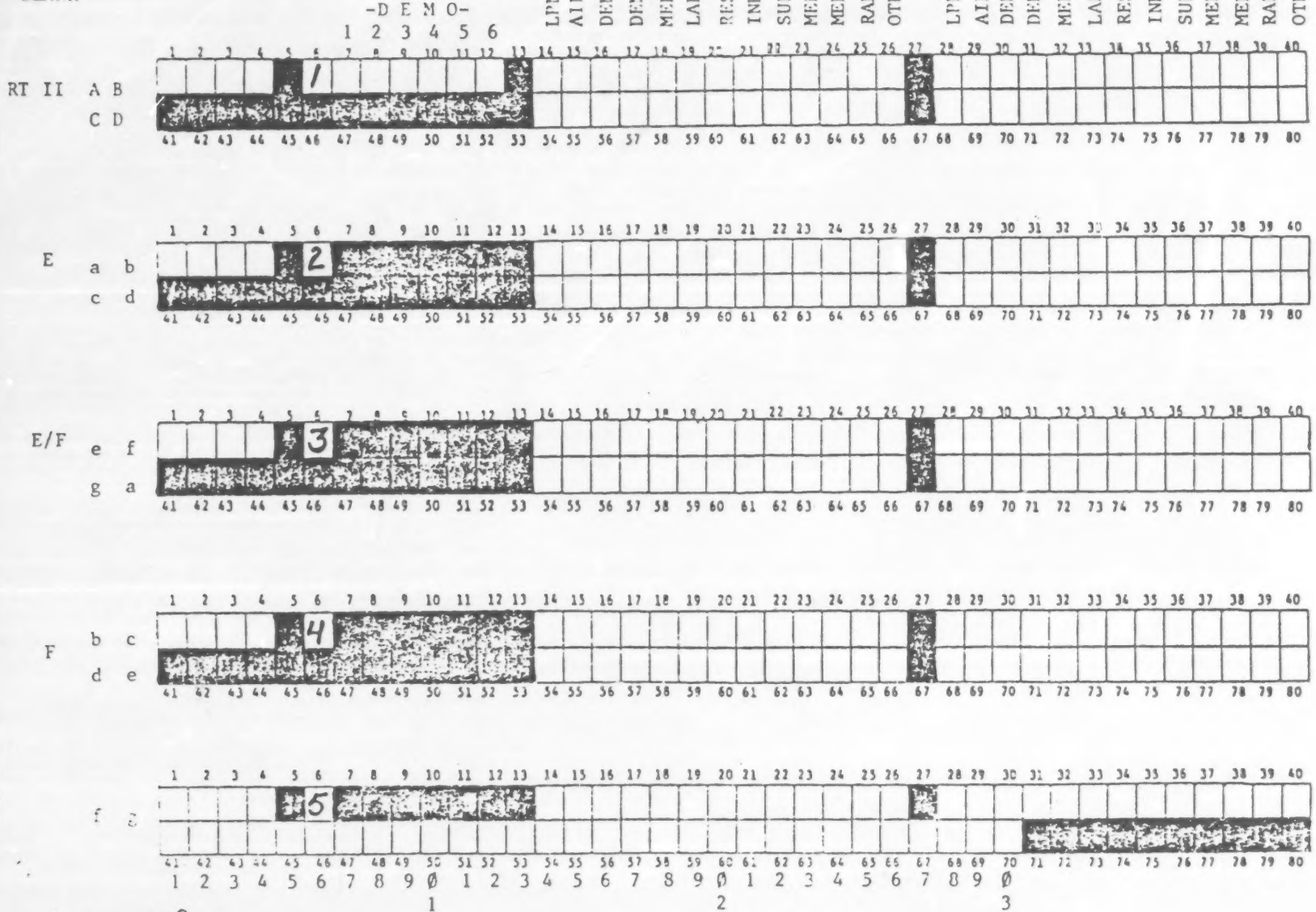
THANK YOU FOR PARTICIPATING!

The cost of printing this publication by Western Kentucky University was paid from state funds KRS 57.375.

...ification of Health
Occupations Project

PROJECT #: CCVIE80A
PROGRAMMER: R. COBB

ALL MISSING DATA SHOULD BE LEFT
BLANK




70

91

Appendix B

Reactions and Comments
from Respondents to the Health
Occupations for the Handicapped Concept

## TEACHERS

### Nursing

"I answered these concerning my field of specialty (nursing). I feel with many other fields greater adjustments can be made more easily and safely. But the stress is great for "a non handicapped" individual and will increase greatly for the physically and mentally handicapped".

"Unable to complete...as we have no handicapped students (except emotionally and learning disabled) in our program and facilities prevent admittance as we are on the third floor with no facilities".

"I suppose any of the following handicapped people could function with certain modifications. However, in most instances, they could not be hired because agencies would not adapt for that one particular person".

"Our school has students enrolled as "handicapped" but none as severe as your definitions--therefore I have answered by the definitions".

"We have no handicapped as you define them--so I can't provide your answers".

"Depends on the severity of the handicapped".

"Unable to evaluate any areas except L.P.N".

"The only program offered is practical nursing--so this is the only one I can evaluate".

### Dental

"Many of the problems indicated as "minor" would be the same for any incoming student into a health program".

"Level of handicaps differ. My answers are based upon definition of all handicapped individuals. Therefore the definition of the "specific learning disability" influenced all choices. I may be confused as to how to rate the problem".

### Medical Laboratory

"Since only one is offered, these do not apply...Not enough flexibility of choice here--it is very difficult to logically select a 1 or 3".

Respiratory Therapy

"This is an incorrect title (inhalation technician)! You should get info correct. This term has not been used for a number of years. The correct title is: Certified Respiratory Therapy Technician".

Radiology

"This is in response to the Survey of Occupational Opportunities In Health Occupations For Handicapped. The survey questions, unfortunately, have not historically applied to Radiologic Technology. This is probably due to the high degree of physical labor, as well as independent tasks that are required of Radiographers. During the early to middle 1960's, I was involved with a hospital based Radiologic Technology Program that trained approximately three-four blind students. This was an arrangement with the...school. These students were trained to work in the film processing area (darkroom). At that time film processing was mostly done by hand and there was very little, if any, mechanical breakdown potential. In today's radiology environment, however, film is processed through very sensitive automatic equipment which requires extensive knowledge, observation and quality control procedures. The difficulty in addressing the educational possibilities for handicapped blind persons (the only handicapped persons I have worked with) in the single area of film processing, is the lack of cumulative and widespread data. I do know that some other Radiologic Technology Programs in other cities and states, employed or trained blind persons during that same period. I am not aware of any published coordinated educational efforts or other related literature. The major problem, of my experience, which resulted in final discouragement for continuing or even formalizing this specialized program for the blind was that, to my knowledge, only one of three or four found employment. I hope the related experience is of some informative assistance to you in your survey. If I can be of more specific assistance please do not hesitate to contact me".

Health Careers

"I would like to respond to some of the things in the questionnaire which I am returning. The "Survey of Occupational Opportunities" etc. , is not really pertinent to the vocational school in which I teach. We have only the one health class which is a combination of all the options which you have listed. I found it very difficult to answer that section because I didn't feel it gave a true picture of what is being taught in the Health Services classes in my area. Thank you for listening to my ideas".

Surgical Technician

"Wish I could be more helpful. I have had little experience with handicapped".

Other

"No Health Occupations Programs available to Handicapped".

"We do not have a health careers program at this time".

"We haven't any handicapped students nor have any applied".

## PRACTITIONERS

### Nursing

"I apologize for not being able to answer the questions the way you need. I have only patient-nurse experience to base answers on--so I'm not really in tune with what the handicapped can achieve. I do however know of one young lady who was asked to leave nursing because the medication she took for epilepsy made her too slow to keep up with the others. She even tried being a ward clerk but the hospital also asked her to resign from that. In my experience in four different general practice physician's offices--I know of no handicapped person hired and do not really feel that short of file clerk the necessary "pace" could be met by most handicapped individuals. Actually, I don't believe this is an appropriate area for the major handicapped population. Generally the work would require more mobility and stamina than the individual is capable of giving and while there may be no mental impairment with deaf or blind people I think they would have to be a "Helen Keller" personality to even attempt most of these areas. The medical field is physically and mentally taxing to be done well and requires all physical and mental processes to be at an optimal level. The individual and the job would have to be very carefully brought together with unusually understanding and caring supervisors. All potential problems vary from minor to major for the individual and the prospective employer. Some can be worked with but cannot be avoided".

"After reading this I cannot see the benefit of me filling this out. On the floor I work on (Respiratory Unit) the pace is usually fast--where most people with a handicap would have problems. I have also noticed that (due to being irritable) sick people have little patience when the nurse is HOH or has a speech problem. I think the best thing for people working on this survey is to spend a little time reviewing first hand the job requirements for the handicapped".

"I don't know anything about Part II on the handicapped. I think you have the wrong person for this".

"I feel I am unable to answer all of these questions as I have never worked with handicapped people such as deaf, blind, the very orthopedically impaired or with a learning disability. I do feel they are usually very kind and considerate people. In the medical field alot depends sometimes on your stamina to really get the job done in a hurry sometimes if someones life is depending on quickness. I do work with nurses who are diabetics. I live with a diabetic husband who never misses work and performs his job to the fullest. My sister-in-law was a epilepsy victim. She raised 5 children and worked at a school lunchroom. Some of these (handicaps) can be controlled with medicine and proper care. I think the deaf and blind could work in offices if properly trained. People with orthopedic problems can do some of these jobs but it depends on the impairment. I am sorry I have not answered this before but... Maybe someone else has alot more knowledge of these problems than I do".

"I believe they need to be placed in jobs that they can be trained for. I believe they would work well if peers would accept the person as a person. I will support them in my daily prayers".

"I work in a 2 nurse setting. I am unable to answer this sheet (part II of survey)".

"I have a daughter hard of hearing who attended a school for the deaf, then a business college...She has held several jobs working with various office machines...She is now married and a mother of a normal son".

"I disagree with some of the definitions. I have bronchial asthma, hypertension, diabetes, arthritis, bad eyes (corrected by glasses), and a few other things health wise...I am employed full time by...and not as a handicapped employee. I am an L.P.N. on a C.C.U.-I.C.U. and recovery room in a military hospital and carry my share of the work".

"I am sorry about not replying sooner but I have been ill. To answer questions on Part II--there isn't any handicapped people working at the hospital where I have been working. None have applied. I know nothing about other facilities in my community. I am no longer working".

"I know nothing about Educationing the handicapped I don't work with them now nor I don't want to. I work in a nursing home & hospital. I'm a L.P.N. not a teacher. I'm not sure who you thought you was sending the questionnaire to but since it is out of my field of work I never attempted to fill it out so please don't send me any more for I won't bother with them either. Thank you". (SIC)

Dental

"I do not feel I can accurately reply since I am no longer working".

"There are no handicapped individuals currently holding a dental hygiene position. I do not have knowledge of the other fields listed".

"I have not been in the work force for nearly 15 years as a Dental Hygienist instructor and do not feel qualified to give answers".

"Success in all fields would depend upon desire an workmanship of each individual".

"Difficulty for handicapped persons to equate into health fields due to limitations of preparedness and communication problems with patient care".

"I am sorry for the lack of answers but I feel to answer questions outside my field range would decrease the validity of this survey. Although I am quite certain that qualified handicapped people are hired frequently in the . . . area. After all, the only handicapped is really in the mind of those who choose to keep their own minds closed".

"I don't know of any handicapped person in any of these positions. So I can't answer questions 1,2,3 and 4 (part II of questionnaire)".

"I don't feel I know enough about these fields to make a judgement whether or not a handicapped person could work in a chosen field. In the dental field there would not be room for a wheelchair in the operatorys past the reception area. Patients would have a hard time communicating with someone who had a hearing impairment. We move fast alot, so anyone who was impaired in that

way wouldn't be able to keep up. I don't think it would bother fellow employees to have a handicapped person working with them".

"I cannot answer these questions because I do not know and I'm sorry I do not have the time now to survey the community... I really can't intelligently answer these questions because I am not handicapped".

"I don't know this information".

"I can speak for no other field than my own. People with these handicaps would find it impossible to find employment. To accommodate these handicaps the office would need to be restructured. Few employers would take on this added expense. Hiring another individual to help the handicap work would not be financially or productively feasible. More money, less productivity . . . In these economic times - no way".

"I am returning the enclosed form in an incomplete state. I would be interested in helping you complete this study if I felt that I was qualified to do so . . . but I do not feel in a position to help you . . ."

"I do not understand how to answer the last page of your survey. I do not see how you can lump all handicaps together and still answer these specific questions. As far as I know, in dental hygiene, a person with a major handicap would be unable to graduate or find an office setting that could make provisions for them. Dental Hygiene is a very specific field".

"I don't feel like I have adequate knowledge to answer the above questions".

"I have no way of knowing how to answer the above questions".

" . . . I feel any of these professions could be successfully occupied by a handicapped individual depending on that handicap. Although they would be capable of performing their job this would have to be conveyed to patients who are often negatively affected by minor things like: age, race, appearance, . . . mustaches, hair length and clothes (seriously)"!

"This is too broad to answer. There are many occupations that could be filled by the following handicaps depending on the specific handicap and occupation".

Medical Laboratory

"This survey should be directed to Personnel Managers as they could respond more fully to many of the questions".

"No handicapped people working in my area and to my knowledge none have applied. There are many routine tasks in a clinical lab setting that people with a wide range of disabilities could easily and competently fill. I have, however, never known of a handicapped person working in any of these positions".

"I do not have the facts needed to answer questions . . . I'm not familiar with the reading level of most handicapped people".

"We have had one deaf person employed in our lab. as a medical lab technician (MLT). She resigned in November 1980 to return to college".

"I feel this is a possibility determined by the person's personality and or type of handicap".

"I filled out this questionnaire as well as I could. My experience with handicapped people in the medical laboratory is limited. However, there are a couple of comments I wish to make. I do feel that deaf or hearing impaired or wheelchair-bound handicapped people could compete on an equal basis in the medical lab. But because of the pressure and the high quality of performance necessary in the lab, I feel that learning disabled people have no place in the medical lab. I hope this has been of some help".

"Since I have nothing to do with the hiring of personnel I did not feel I would be able to complete the questionnaire".

"I currently work with a deaf medical technologist and a person incapable of speech. Both work out well with minor telephone problems".

"We have had a deaf girl working in central supply, a crippled speech therapist and have had 2 crippled medical technologists . . . problems though".

"The survey is too general. It is difficult to know if a perosn with a handicap can perform a job without knowing the specific handicap and specific job".

Respiratory Therapy

"The areas which I have checked in areas other than my own were checked because I have seen the handicapped perform in these areas".

"Lets not kid ourselves. By the time the money available is spent identifying the problems there is none left to implement a program to solve them. Forget it"!

"For a survey being done by the Center for Career and Vocational Education, you are hopelessly outdated . . . Respiratory Therapy is the correct term for my health occupation . . . NOT Inhalation Therapy. (People "exhale" as well as "inhale"). Credentials are not A.R.R.T. or C.I.T. Credentials are R.R.T. or C.R.T.T. as recognized by the National Board for Respiratory Therapy. Your job descriptions are wrong also in that both these credentialed paraprofessionals perform the same tasks. Thought you'd like to know from someone who's involved and wants to see Respiratory Therapy facts propogated correctly".

Medical Records

"I really do not feel qualified to complete this survey, although as you can see I have done so to the best of my knowledge and scant working time with handicapped employees. There are only a couple of handicapped individuals working in this department, one with a slight orthopedic handicap (leg brace), one with rather severe diabetes which does not hamper her ability to produce an amazing quantity and quality of work, and one or two slightly hard of hearing individuals, mostly unhampered by their anomaly. I filled out the survey from the viewpoint of my own job, more than for the department as a whole but with department-wide jobs to a certain degree involved with mine as quality assurance technician. Please keep this in mind when evaluating the results".

"After completing part I - I feel that this questionnaire should be completed by the personnel director - not me".

"Glad to be of assistance".

"Do not think this survey applies to me since I am still a student enrolled in Medical Records (4 yrs.)".

"Unfortunately, I have not had a handicapped person apply for a position in my department. I have, in the past, hired handicapped persons and have found that they make excellent and dedicated employees. I would certainly consider hiring one".

"I do not have any of this information. I do not know any handicapped persons in our facility in any of these fields. I think this information would come from our personnel service".

"I haven't had any contact with the handicapped so I feel unable to complete form as requested".

"These replies are colored by experience in a mental retardation facility and trying to place handicapped in community jobs".

"Many times working in the health field requires much standing, walking, stooping and having to maneuver patients. I would think many/most of listed jobs would be difficult for many handicapped people. You need to speak with patients, probably many of whom might not know how to communicate with a handicapped person. I would think a health professional would need to be able to hear and see to work with very ill patients who cannot help personnel help them. Many times the health professional is giving instructions to the patient and needs to be able to make decisions quickly and be able to move fast when necessary. In my field, I would think you'd need someone who could read and comprehend fairly easily. There are many telephone calls and a person would need to be able to hear. A medical transcriptionist can have hand controls instead of foot controls for those with orthopedic problems. This is very hard for me to judge. To be truthful; it seems I do not run into very many handicapped people in the health field. I do know some medical records people with orthopedic problems but they are not wheelchair bound or use crutches or canes, but may have a brace or have a pronounced limp. I hope this has been of help. Thank you for the opportunity to participate in this. It has really made me think".

"I did not complete the remainder of the survey. It has been about 10 years now since I worked in medical records. Since I am not acquainted with new equipment, etc. I feel it would be unfair of me to answer the following questions. Thank you".

Radiology

"Not qualified to answer".

"Most mature health care professionals should not be bothered by physical appearance".

"Every level of problem depends directly on job requirements and handicaps of individual".

"Please forgive me for not responding sooner but we have been out of state most of the winter. I also am now retired and therefore in no position to help much with handicapped people. Most handicapped people I know of working in radiology are almost always in dark room work although I have seen some with orthopedic problems working as technologists and doing average or above average work. Because of the way the questionnaire is written some of my answers seem to contradict each other but this was not the intent".

"Sorry I was unable to comment on many questions as we do not have any handicapped employees presently".

"After carefully studying the enclosed questionnaire, I am returning it uncompleted. I don't feel my involvement in the medical field as a health occupations professional qualifies me to answer the questions. Having had no experience working with or teaching handicapped individuals, my knowledge for judging their capabilities and/or limitations is inadequate. For this reason, I don't feel my responses would be valid in evaluating or identifying opportunities available to the handicapped in health occupations".

Other

"In our department we have not had this to arrive".

"Due to the fact that I am retired the survey is not complete because I do not know the answers. I am not in contact with many people".

"I retired in 1971. Answers relate to time previous to retirement. I cannot answer for all fields".

"I am sorry I can not help with this survey as I no longer work in a Health Occupation. Why I'm not would be a subject for your consideration in another survey".

"Thank you for the pencil".

"I am in private practice and do not have dealings with the community health services, therefore do not have enough data to provide the information you request. Sorry".

"I am returning your survey form as I feel I am not qualified to answer these questions. Our Histology/Cytology Laboratory does not have a training program. I am sorry I could not be of help".

"Sorry, I retired in 1974 and will not be able to complete this questionnaire".

"I received your questionnaire on job placement for the handicapped. I read each individual question and answered what I felt I was qualified to answer. Although I have to disagree with some of your groupings of the physically handicapped. Ex. orthopedically handicapped - Someone with club feet may be able to fulfill many of the duties listed on the sheet, but I don't think that a person with cerebral palsy would be able to do the same things, nor a person with T.B. of the spine. This may in turn be keeping alot of people form being placed in

certain positions of employment. Another example of this is diabetes. I personally know an R.N. who was a child diabetic. She performs her job skillfully but I don't think a person with epilepsy could do the same duties. Also having a sister with a learning disability, I know that she would be capable to do things required of a nurses aide. But not if she was required to take "vital signs". Again another obstacle. I could not truthfully say on the questionnaire that people with learning disabilities can be nurses aides or orderlies. I hope this will help and also am very glad to see someone taking an interest in the mentally and physically handicapped. I feel Kentucky especially is very backward in this area and needs more facilities. Please contact me in the future if you have any further questions".

"There are many handicapped people who are well able to hold down skilled positions in the medical field. However, their individual situations have to be dealt with. It is impossible to lump them all together and say what positions handicapped people can fill successfully. My husband has exotropia, a visual handicap which causes problems because the prospective employer notices the roving eye and writes him off immediately. The only jobs he can get are the low paying minimum wage jobs as custodian or janitor. He had a chance for a good job once, but the insurance company restricted the policy so as not to cover the handicapped employees. My husband knows his limitations and stays within them as most handicapped workers do. The biggest problem will be getting jobs for the people no matter how well trained they are. I would very much like to be involved with helping these people because they are usually more conscientious and dependable than normal people".

"I sent your questionaire up to a member of administration and was told it was just a judgement call and since I did not feel qualified or in position to say if the hospital or the community could or would hire a handicapped person, I just threw the questionaire away. I'm sorry, but after thinking about it, I will now say what I. myself think.

There is one person working in our hospital that would be considered a handicapped person, she works in the X-ray dept. She is youg and very capable. She has an artificial leg.

I can't remember all that was on the questionaire, but hearing is a must. Persons with speech impairedment or emotionally disturbed or mentally retarded just would not work in the hospital. Now again I say this is just my thoughts on the subject. A desk job might work out for some types of handicapped persons. We have ramps, but the doors could be a problem. My suggestion is for you to send your questionaire to the admistrater or the mayer of the city, as they are the one's that have the knowledge of job position.

Believe me when I say my heart and prayers go out to every handicapped person, and I admire then so much for working so hard to better themselves.

I am a L.P.N. Pharmacy Tech. I worked in Nursing for nine-teen years and five years in the pharmacy. I have never worked with the handicapped, just with the physically sick.

I hope I have been of some help and am sorry I did not answer your questionaire". (SIC)

Appendix C

MAJOR PROBLEM SELECTIONS
OF TEACHERS AND PRACTITIONERS
Showing Frequency, Percent and Rank

| POTENTIAL PROBLEM | TEACHERS Freq. | % | Rank | PRACTITIONERS Freq. | % | Rank |
|---|---|---|---|---|---|---|
| 1. Standard of performance expected from all students/employees. | 32 | 36.8 | 4 | 68 | 23.0 | 10 |
| 2. Extra time required for special needs of handicapped persons. | 31 | 35.6 | 5 | 60 | 20.3 | 11.5 |
| 3. Teacher, supervisor and administrator inexperienced in teaching/working with handicapped persons. | 28 | 32.0 | 9 | 83 | 28.0 | 6 |
| 4. Reading level of most handicapped people. | 30 | 34.5 | 6.5 | 49 | 16.6 | 14 |
| 5. Finding jobs which are related to the training they receive. | 39 | 44.8 | 1.5 | 96 | 32.4 | 2.5 |
| 6. Lack of prevocational skills necessary for entry success in many health fields. | 18 | 20.7 | 17.5 | 133 | 44.9 | 1 |
| 7. Safety hazards that exist in laboratories and other work places. | 18 | 20.7 | 17.5 | 72 | 24.3 | 8 |
| 8. Peer attitudes toward having handicapped persons in the work place/vocational program. | 3 | 3.4 | 28 | 33 | 11.1 | 25 |
| 9. Necessity for assistance in transporting physically handicapped persons to on-the-job sites/training sites. | 35 | 40.2 | 3 | 69 | 23.3 | 9 |
| 10. Vocational staff, supervisors, administrators, and other personnel's attitude about working with handicapped persons. | 2 | 2.3 | 29 | 34 | 11.5 | 24 |
| 11. Physical appearance of handicapped persons. | 0 | 0 | 30 | 14 | 4.7 | 30 |
| 12. Personal hygiene of handicapped persons. | 8 | 9.2 | 26.5 | 25 | 8.4 | 27 |
| 13. Stamina needed to complete a vocational training program an eight hour work day, possibly requiring overtime. | 22 | 25.3 | 12 | 93 | 31.4 | 4.5 |
| 14. Entrance requirements for vocational programs employment being too strict for handicapped persons. | 16 | 18.4 | 21 | 93 | 31.4 | 4.5 |
| 15. Handicapped person's level of self-esteem and confidence. | 10 | 11.5 | 24.5 | 40 | 13.5 | 22 |

Major Problems (Cont.)

| POTENTIAL PROBLEM | TEACHERS Freq. | % | Rank | PRACTITIONERS Freq. | % | Rank |
|---|---|---|---|---|---|---|
| 16. Handicapped person's ability to follow oral instructions. | 20 | 23.0 | 15 | 45 | 15.2 | 19 |
| 17. Handicapped person's ability to communicate in written form. | 24 | 27.6 | 11 | 48 | 16.2 | 15.5 |
| 18. Handicapped person's level of verbal skills. | 21 | 24.1 | 13.5 | 48 | 16.2 | 15.5 |
| 19. Handicapped person's attitude toward learning/ professional growth and development. | 10 | 11.5 | 24.5 | 28 | 9.5 | 26 |
| 20. Availability of trained support personnel (e.g., interpreter, nurse or other person knowledgeable of emergency first aid, etc. counselors, specialists). | 39 | 44.8 | 1.5 | 96 | 32.4 | 2.5 |
| 21. Family reluctance to accept job/program placement recommendations and task requirements deemed appropriate by the employer/vocational education staff. | 17 | 19.5 | 19.5 | 39 | 13.2 | 23 |
| 22. Methods of evaluating handicapped person's performance. | 17 | 19.5 | 19.5 | 23 | 7.8 | 28 |
| 23. Evaluating handicapped persons differently than other employees/students. | 25 | 28.7 | 10 | 42 | 14.2 | 20 |
| 24. Architectual barriers. | 29 | 33.3 | 8 | 82 | 27.7 | 7 |
| 25. Handicapped person's level of understanding of job vocabulary. | 19 | 21.8 | 16 | 51 | 17.2 | 13 |
| 26. Community resistance to employment of/programs for handicapped persons. | 8 | 9.2 | 26.5 | 41 | 13.9 | 21 |
| 27. Preparing employers to accept handicapped persons as employees. | 30 | 34.5 | 6.5 | 60 | 20.3 | 11.5 |
| 28. Handicapped person's level of personal social skills. | 11 | 12.6 | 23 | 22 | 7.4 | 29 |
| 29. Handicapped person's knowledge of job survival skills. | 14 | 16.1 | 22 | 46 | 15.5 | 18 |
| 30. Handicapped person's level of math and computation skills. | 21 | 24.1 | 13.5 | 47 | 15.9 | 17 |

MINOR PROBLEM SELECTIONS
OF TEACHERS AND PRACTITIONERS
Showing Frequency, Percent and Rank

| POTENTIAL PROBLEM | TEACHERS Freq. | % | Rank | PRACTITIONERS Freq. | % | Rank |
|---|---|---|---|---|---|---|
| 1. Standard of performance expected from all students/employees. | 42 | 48.3 | 16.5 | 148 | 50.0 | 13.5 |
| 2. Extra time required for special needs of handicapped persons. | 48 | 55.2 | 6 | 179 | 60.5 | 1 |
| 3. Teachers, supervisor and administrator inexperienced in working with handicapped persons. | 47 | 54.0 | 7.5 | 149 | 50.3 | 11 |
| 4. Reading level of most handicapped people. | 36 | 41.4 | 25 | 145 | 49.0 | 16 |
| 5. Finding jobs which are related to the training they receive. | 33 | 37.9 | 27.5 | 125 | 42.2 | 25 |
| 6. Lack of prevocational skills necessary for entry success in many health fields. | 43 | 49.4 | 15 | 96 | 32.4 | 29 |
| 7. Safety hazards that exist in laboratories and other work places. | 49 | 56.3 | 5 | 162 | 54.7 | 4 |
| 8. Peer attitudes toward having handicapped persons in the work place/vocational programs. | 50 | 57.3 | 3.5 | 164 | 55.4 | 3 |
| 9. Necessity for assistance in transporting physically handicapped persons to on-the-job sites/training sites. | 31 | 35.6 | 29.5 | 158 | 53.4 | 8 |
| 10. Vocational staff, supervisors, administrators, and other personnel's attitude about working with handicapped persons. | 45 | 51.7 | 10.5 | 159 | 53.7 | 6.5 |
| 11. Physical appearance of handicapped persons. | 41 | 47.1 | 18.5 | 120 | 40.5 | 27 |
| 12. Personal hygiene of handicapped persons. | 41 | 47.1 | 18.5 | 95 | 32.1 | 30 |
| 13. Stamina needed to complete vocational training program an eight hour work day, possibly requiring overtime. | 47 | 54.0 | 1.5 | 131 | 44.3 | 22 |
| 14. Entrance requirements for vocational programs employment being too strict for handicapped individuals. | 39 | 44.8 | 22 | 127 | 42.9 | 24 |
| 15. Handicapped person's level of self-esteem and confidence. | 50 | 57.5 | 3.5 | 148 | 50.0 | 13.5 |

Minor Problem (Cont.)

| POTENTIAL PROBLEM | TEACHERS Freq. | % | Rank | PRACTITIONERS Freq. | % | Rank |
|---|---|---|---|---|---|---|
| 16. Handicapped person's ability to follow oral instructions. | 44 | 50.6 | 13 | 150 | 50.7 | 10 |
| 17. Handicapped person's ability to communicate in written form. | 38 | 43.7 | 23.5 | 148 | 50.0 | 13.5 |
| 18. Handicapped person's level of verbal skills. | 44 | 50.6 | 13 | 159 | 53.7 | 6.5 |
| 19. Handicapped person's attitude toward learning/ professional growth and development. | 45 | 51.7 | 10.5 | 122 | 41.2 | 26 |
| 20. Availability of trained support personnel (e.g., interpreter, nurse or other person knowledgeable of emergency first aid, etc., counselors, specialists). | 31 | 31.5 | 29.5 | 117 | 39.5 | 28 |
| 21. Family reluctance to accept job/program placement recommendations and task requirements deemed appropriate by the employer/vocational education staff. | 40 | 46.0 | 20.5 | 152 | 51.4 | 9 |
| 22. Methods of evaluating handicapped person's performance. | 44 | 50.6 | 13 | 148 | 50.0 | 13.5 |
| 23. Evaluating handicapped persons differently than other employees/students. | 33 | 37.9 | 27.5 | 131 | 44.3 | 22 |
| 24. Architectual barriers. | 35 | 40.2 | 26 | 131 | 44.3 | 22 |
| 25. Handicapped person's level of understanding of job vocabulary. | 40 | 46.0 | 20.5 | 143 | 48.3 | 18 |
| 26. Community resistance to employment of/ programs for handicapped persons. | 46 | 52.9 | 9 | 133 | 44.9 | 20 |
| 27. Preparing employers to accept handicapped persons as employees. | 38 | 43.7 | 23.5 | 143 | 48.3 | 18 |
| 28. Handicapped person's level of personal social skills. | 54 | 62.1 | 2 | 166 | 56.1 | 2 |
| 29. Handicapped person's knowledge of job survival skills. | 51 | 58.6 | 1 | 160 | 54.1 | 5 |
| 30. Handicapped person's level of math and computation skills. | 42 | 48.3 | 16.5 | 143 | 48.3 | 18 |

NO PROBLEM EXPECTED SELECTIONS
OF TEACHERS AND PRACTITIONERS
Showing Frequency, Percent, and Rank

| POTENTIAL PROBLEM | TEACHERS Freq. | % | Rank | PRACTITIONERS Freq. | % | Rank |
|---|---|---|---|---|---|---|
| 1. Standard of performance expected from all students/employees. | 10 | 11.5 | 24 | 38 | 12.8 | 21.5 |
| 2. Extra time required for special instruction of handicapped persons. | 4 | 4.6 | 29.5 | 10 | 3.4 | 30 |
| 3. Teacher, supervisor and administrator inexperienced in teaching/working with handicapped persons. | 9 | 10.3 | 25 | 20 | 6.8 | 27.5 |
| 4. Reading level of most handicapped people. | 13 | 14.9 | 19.5 | 58 | 19.6 | 12 |
| 5. Finding jobs which are related to the training they receive. | 8 | 9.2 | 26 | 32 | 10.8 | 24 |
| 6. Lack of prevocational skills necessary for entry success in vocational programs. | 15 | 17.2 | 15.5 | 19 | 6.4 | 29 |
| 7. Safety hazards that exist in laboratories and other work places. | 11 | 12.6 | 23 | 20 | 6.8 | 27.5 |
| 8. Peer attitudes toward having handicapped persons in vocational programs/work place. | 29 | 33.3 | 4 | 58 | 19.6 | 12 |
| 9. Necessity for assistance in transporting physically handicapped persons to on-the-job training sites/on-the-job sites. | 15 | 17.2 | 15.5 | 29 | 9.8 | 26 |
| 10. Vocational staff supervisors, administrators, and other personnel's attitude toward working with handicapped persons. | 34 | 39.1 | 2 | 65 | 22.0 | 7.5 |
| 11. Physical appearance of handicapped persons. | 41 | 47.1 | 1 | 122 | 41.2 | 2 |
| 12. Personal hygiene of handicapped persons. | 32 | 36.8 | 3 | 136 | 45.9 | 1 |
| 13. Stamina needed to complete the length of vocational training programs/an eight hour work day. | 8 | 9.2 | 26 | 31 | 10.5 | 25 |
| 14. Entrance requirements for vocational programs/employment being too strict for handicapped individuals. | 23 | 26.4 | 6 | 34 | 11.5 | 23 |
| 15. Handicapped person's level of self-esteem and confidence. | 19 | 21.8 | 9.5 | 62 | 20.9 | 9 |

No Problem (Cont.)

| POTENTIAL PROBLEM | TEACHERS Freq. | % | Rank | PRACTITIONERS Freq. | % | Rank |
|---|---|---|---|---|---|---|
| 16. Handicapped person's ability to follow oral instructions. | 16 | 18.4 | 13.5 | 40 | 13.5 | 20 |
| 17. Handicapped person's ability to communicate in written form. | 18 | 20.7 | 11 | 54 | 18.2 | 15.5 |
| 18. Handicapped person's level of verbal skills. | 16 | 18.4 | 13.5 | 40 | 13.5 | 20 |
| 19. Handicapped person's attitude toward learning/professional growth and development. | 23 | 26.4 | 6 | 101 | 34.1 | 3 |
| 20. Availability of trained support personnel (e.g., vocational counselors, speech and hearing specialists, etc., interpreter, nurse, first aid). | 4 | 4.6 | 29.5 | 41 | 13.9 | 19 |
| 21. Parents reluctance to accept job/program placement recommendations deemed appropriate by vocational education staff/ employer. | 12 | 13.8 | 21.5 | 54 | 18.2 | 15.5 |
| 22. Methods of evaluating handicapped person's performance. | 17 | 19.5 | 12 | 79 | 26.7 | 5.5 |
| 23. Grading handicapped persons differently from other students/employees. | 20 | 23.0 | 8 | 80 | 27.0 | 4 |
| 24. Architectural barriers. | 14 | 16.1 | 17.5 | 38 | 12.8 | 21.5 |
| 25. Handicapped person's level of understanding of job vocabulary. | 19 | 21.8 | 9.5 | 56 | 18.9 | 14 |
| 26. Community resistance to supporting programs for/employment of handicapped persons. | 23 | 26.4 | 6 | 79 | 26.7 | 5.5 |
| 27. Preparing employers to accept handicapped persons as employees. | 8 | 9.2 | 26 | 51 | 17.2 | 17 |
| 28. Handicapped person's level of personal social skills. | 14 | 16.1 | 17.5 | 65 | 22.0 | 7.5 |
| 29. Handicapped person's knowledge of job survival skills. | 12 | 13.8 | 21.5 | 45 | 15.2 | 18 |
| 30. Handicapped person's level of math and computation skills. | 13 | 14.9 | 19.5 | 58 | 19.6 | 12 |